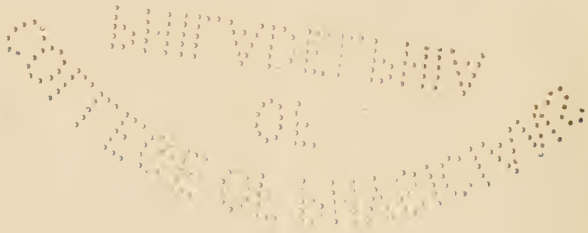
Southern California Practitioner

VOLUME XXXV

Founded in 1885 by Walter Lindley

1414 SOUTH HOPE ST.
LOS ANGELES, CALIFORNIA
1920



INDEX TO VOL. XXXV
1920

TITLES OF ORIGINAL ARTICLES

EDITORIALS

GENERAL INDEX

SOUTHERN CALIFORNIA PRACTITIONER.

Vol. XXXV. LOS ANGELES, JANUARY, 1920 No. 1

TUBERCULAR PERITONITIS.

BY W. O. HENRY, M.D., LOS ANGELES.

Inflammation of the peritoneum is so common and is produced by so many causes that it need not occasion surprise that the widespread prevalence of the Bacillus of Tuberculosis should sometimes give rise to inflammation of this membrane either primarily or secondarily. The Bacillus may reach the peritoneum through the blood, the lymphatics, the intestine and in women through the Fallopian Tubes.

Nothnagel says that in the majority of cases the lungs are primarily involved. And Da Costa, "In the majority of the cases Foci of Tuberculosis exist and in at least half the cases the lungs are involved. Some contend that the disease is always secondary although others hold that whilst it is generally secondary it is sometimes primary."

One authority says, "Tuberculous Peritonitis may form a part of the generalized Tuberculosis, it may follow a tubercular intestinal legion, tuberculosis of the appendix, or tuberculosis of the mesentery glands, or the bacteria may enter by way of the Fallopian Tubes, the blood or the lymph."

My own experience and observations, lead me to believe that the lungs are not the primary source of infection in the vast majority of cases. In this connection it would be interesting and instructive to know just what the large tubercular sanatoria can show on this point.

Do they find any large per cent of their lung cases developing a peritoneal process?

In their post mortems do very many of their cases show much peritoneal involvement?

"In forty-four hundred and seventy autopsies in women only fifty-three showed a tubercular condition of the tubes and in one hundred and sixteen autopsies on tubercular women only fourteen showed the tubes involved."

Of course, in all cases where there is a widespread tubercular process going on, it would not be surprising if this membrane should share in a general condition. But I seriously doubt if the peritoneum takes on infection early from the lung as a rule. In other words my belief is that the infection of the peritoneum usually rises from other local conditions or as a primary infection.

Clinically there appears to be two varieties, the ascitis and the dry or-

caseous although some men think these are the different stages in the same process.

A large proportion of cases are due to bovine tuberculosis. It seems to be generally believed that at least half of these cases are of this type and some hold even a larger percentage. Barker says 50%. The English commission said 47% while the German commission said 63%.

DIAGNOSIS. The diagnosis is not always easy, for the symptoms are often obscure and a careful painstaking examination or series of examinations would be required. There is likely to be moderate and irregular fever.

There will be anemia, loss of appetite, loss of flesh, weakness, some colicky pain, and tenderness upon pressure. Tympany is not uncommon. A rather striking and common symptom is frequent urination. There may be diorrhea alternating with constipation. Ascites comes on gradually in some cases. The nodular masses may sometimes be felt and when the intestines are thus matted together, they may be easily mistaken for a tumor of benign or malignant character.

A vaginal or rectal examination may sometime detect the tubercular nodules in the pelvis and establish the suspected condition.

Of course the Vom Pirquet and other tubercular tests are positive.

If there be a family history of tuberculosis and if there be found a local tubercular process going on somewhere else in the body these will aid in establishing the diagnosis. Prognosis—The prognosis is good unless the case is neglected or unless there be some more serious condition present than the tubercular peritonitis. If the peritonitis be secondary to some incurable condition, then, of course, the case will not recover. If there be present some other incurable condition you cannot promise a cure, not because of the peritoneal condition, but of the more serious one. If the case be neglected or improperly treated it may not recover. But we may truthfully say that the majority of cases of tubercular peritonitis where that is the major ailment, will recover under proper treatment. In the Massachusetts General Hospital, for a ten-year period, there was shown a mortality of 68% in cases treated medically; and 37% in cases treated surgically. I am wondering if there was not a little fault in trusting too much to medical treatment alone, and in the surgical cases in failing to be radical enough. W. J. Mayo, in speaking of an address he gave before the Mississippi Valley Medical Association on this subject said, "At that time I was particularly interested in the relation of tuberculosis of the tubes to tuberculous peritonitis and reported in detail some cases in which simple laparotomy with the evacuation of fluid had been carried out from three to seven times with a reaccumulation of the fluid and failure to cure; followed by prompt cure after the removal of the tuberculous tube." Thus we see he learned by sad experience the need for more radical work to effect a cure in some cases. May it not be that others have failed in their cures for the same reason? I desire, therefore, to insist upon proper treatment when I am sure the cures will be correspondingly greater.

It may be of interest to note the percentage of cures given by different operators which no doubt shows the difference in the technique and in the personal judgment of men. Koenig gives his cures at 65%; Marganicci, 85%; Roesch, 70% and Wonderlich, 20%.

The medical cures given by others are said to be equally as good. Von Ruck claims three cases out of four cured by tuberculin. Others who claim cures by this method are Gay, Runch, McCall, Lesser, Kummel and Riegel.

TREATMENT. It is significant that

so skillful a surgeon and so great a pathologist as the late Christian Fenger said shortly before his death, "Tubercular peritonitis is a disease for the internist to treat and does not belong to the surgeon.

While only a few months after this great surgeon's death, no less an authority than Billings of Chicago said, "Tubercular peritonitis is a surgical disease and does not belong to the class of cases to be treated by the medical man or the internist."

Today, however, I think we may say the profession is more agreed upon the treatment of these cases for some of them are wisely and properly treated and cured by the internist alone; while others fall very properly into the hands of the surgeons. We should insist that these cases be not allowed to linger uncured in the hands of the internist nor should the surgeon think there is no need for proper medical and hygienic care after he has operated the case. Proper sanitation, hygiene dietetics and medical care are important in all cases. Surgical interference with removal of the chief point of infection so far as possible in many cases is essential to cure.

Let us cite the following cases to illustrate: Case one, Mrs. L., mother of several children, was a comparative invalid for several years. This case occurred in my early experience and I found her to have a retro-flexed uterus with tubercular involvement of the tubes and ovaries. In this case I simply opened the abdomen removed the tube and ovary most seriously involved and suspended the uterus.

I found the small intestines, the body of the uterus, the tubes and ovaries and the abdominal wall widely and extensively covered with the tubercles, but feeling satisfied with removing the worst point of infection and fixing up the uterus I closed the abdomen without drainage and the patient made a very satisfactory recovery.

Case two, Mrs. C., age thirty years, had been running down in health with the usual history found in these cases. She was put upon careful medical treatment, for several weeks, but continued to fail and was then subjected to operation as the former case after which she steadily improved and had no recurrence when last heard from, ten years later.

Case three, Mrs. J. had tubercular peritonitis and in addition to the usual symptoms suffered from nausea, vomiting, chill, and fever. Temperature sometimes as high as 102, pulse 140. Here the tubes and ovaries were removed and the patient rapidly recovered and the temperature went down to normal. She left the hospital in good condition but I have not had further report from her.

Case four, Mrs. W., age thirty, married several years but never pregnant had been for several months gradually failing in health. She had fever, pain, tenderness over abdomen and as she became more emaciated and weakened there was a gradual enlargement of the abdomen until when I saw her she was just able to walk across the room with the assistance of two friends, but so greatly was she distended that she was unabel to lie down, nor was she able to eat anything and was therefore in a very pitiable and critical condition.

Upon opening the abdomen there must have been about three gallons of fluid escape and all the organs were pretty well covered with tubercular masses and the pelvis was quite filled with them and I scooped these masses out very freely with my hand. The tubes and ovaries were removed, the abdominal cavity was thoroughly dried, and the adhesive points in the pelvis were wiped with pure carbolic acid. The wound was carefully closed and the patient put to bed. After a few days she was given quinine and guiacol and put upon a nourishing diet. She made a prompt and very satisfactory recovery. She remained well and in good health for more than three years

at which time she again appeared at my office looking the picture of health, but complained of having trouble with her bowels. Various means were used to get the bowels to move but without avail. After repeated consultations and every effort proving futile it was decided to open the abdomen and see where the trouble was. Upon opening the abdomen the peritoneum and all organs were free from all appearance of tuberculosis, but the meso-colon had developed into a large yellow cord as large as a man's index finger, which bound the colon firmly to the posterior wall and prevented the movement. The operation, of course, did no good and the woman died within a few days.

Case five, Mrs. J., age 24, married for two years, never pregnant, had fever, confined to her bed was said to have tubercular peritonitis with no hope of recovery. She was of tubercular family, had a delicate constitution and my examination confirmed the diagnosis.

Irregular tender nodular masses found in the pelvis by the vaginal and rectal examination clearly showed the tubercular condition. Rest, open air, good food, quinine and guiacol and tuberculin together with tincture of iodine to the vaginal vault resulted in a cure.

A recent report from this case shows her still after three years to be in good health.

Let me summarize as follows:

First:—Tubercular peritonitis is not a very common disease but occurs most frequently in women, probably seventy or eighty per cent of the cases.

Second:—Symptoms are more or less obscure and indefinite in the early stages but if the physician will remember the foregoing points—and make a careful painstaking examination the diagnosis can usually be satisfactorily made.

Third:—There are two varieties, the moist and the dry and the majority of the cases are of the bovine type.

Fourth:—The prognosis is good if the proper treatment be given in reasonable time.

Fifth:—The treatment may be either medical or in certain cases operative followed by the former. Of course, in all cases proper hygiene, diet, and the best obtainable climatic conditions are desirable.

Sixth:—Proper operative treatment should include not only open the abdomen but also the removal as far as possible of the original point of infection. The ovaries do not need to be removed unless they are seriously involved.

Seventh:—Draining is seldom if ever required but if there has been much ascites a large abdominal pad should be applied and a firm bandage should make suitable pressure to prevent shock. 822 W. 6th St., Los Angeles.

A SILVER GERMICIDE IN CONVENIENT FORM.

Silvol Capsules, a convenient form of Silvol, enables physicians to prepare a fresh solution of Silvol in a few minutes. The contents of one capsule, when dissolved in two fluidrachms of water, make a 5 per cent. solution of Silvol. The contents of four capsules, when added to two fluidrachms of water, make a 20 per cent solution of Silvol.

Silvol is a non-irritating silver germicide. It is indicated in the treatment of acute inflammations of the mucous membrane of the eye, ear, nose, throat, urethra, and vagina. It is employed in solutions ranging from 5 to 50 per cent.

Removal Notice—After August the 15th, 1919, our office address will be 20, 22, 24 Grand Street. Laboratory, receiving and shipping departments, 23, 25, 27 Sullivan Street. The Denver Chemical Mfg. Company, New York, U. S. A.

SOUTHERN CALIFORNIA PRACTITIONER.

A MEDICAL, CLIMATOLOGICAL AND SOCIOLOGICAL MONTHLY MAGAZINE.
This journal endeavors to mirror the progress of the profession of California and Arizona.

Established in 1886 by Walter Lindley, M.D., LL.D.
DR. GEORGE E. MALSBARY, Editor and Publisher.

Associate Editors,
Dr. Walter Lindley, Dr. W. W. Watkins, Dr. Ross Moore, Dr. George L. Cole, Dr. Cecil E. Reynolds, Dr. William A. Edwards, Dr. Andrew W. Morton, Dr. H. D'Arcy Power, Dr. B. J. O'Neill, Dr. C. G. Stivers, Dr. Olga McNeile, Dr. W. H. Dudley, Dr. J. M. Mathews.

Address all communications and manuscripts to
EDITOR SOUTHERN CALIFORNIA PRACTITIONER,
Subscription Price, per annum, $1.00. 1414 South Hope Street, Los Angeles, Cal.

EDITORIAL

"CHILD'S RIGHT IN BODY UPHELD".

"Court Says Schools Have No Authority to Force Medical Examinations". Such is the heading in a notice appearing prominently in the Los Angeles Times, December 17th, 1919. Then follows: "School authorities have no right to force children to submit to medical examination against the wishes of their parents, it was decided today by Judge W. T. O'Donnell of Solano County in the suit of Grove L. Bennett of Vallejo against J. T. Utter, principal of the Vallejo school. Utter, acting under instructions from the State Board of Health, suspended Bennett's daughter when the parents refused to allow a throat examination during an alleged epidemic of diphtheria several months ago. Judge O'Donnell's decision ordered the school to reinstate the Bennett girl".

The question naturally arises whether such a foolish decision by some ignoramus on the bench tends to justify the caption, "Child's Rights in Body Upheld". The court is responsible for the child's body, responsible both to society at large and to the child for the care of the child's body, and such responsibility is in no wise lessened by the fact that the child is in a public school, nor is it altered by the desires of the parents of the child. It is a grave question, if it is really at all questionable, whether the court's duty to the child and to society could be rationally interpreted as having been in any wise discharged through acquiesence to the foolish wishes of the child's parents, refusing to sanction the examination of the child's throat during an "alleged" epidemic of diphtheria.

If such "decisions" of "judges" are to be permitted to stand, the child's rights in its body would seem to be best upheld by keeping your children at home, especially during "alleged" epidemics of contagious diseases. Such decisions might well be classed with German propaganda. At any rate they are decidedly un-American, for they strike a serious blow at the educational system which is so vital a part of Americanism, and they tend to increase the hazzard of attendance at the public school.

Furthermore, such "decisions" are

un-American in that they tend to increase contempt for our judiciary. It is a phase of our political system, that incompetent men are sometimes called upon to preside as "judges". Usually their "decisions" do not do much damage, being overruled in other courts. Upon the whole, our legal fraternity with few exceptions, is of the highest order professionally, both moral and patriotic, quite undeserving much of the opprobrium heaped upon them. Otherwise our government could not be stable. It is unfortunate that the judiciary has its comparatively few incapable and short-sighted "judges". We can appreciate this all the more, for in the medical profession there are incapable and unworthy members that tend to bring the profession into disrepute. We hope in this instance the court was not misled by such counsel.

DR. CECIL REYNOLDS IN ENGLAND.

Royal Crescent Hotel.
Brighton, England.
Dec. 2, 1919.

My Dear Editor:

Just a line to say that I am greatly looking forward to seeing you again soon. England has been a sad disillusionment to me and I thank God daily that I am an American. I trust, a better one than I could ever have been, had I not taken this opportunity of viewing the contrast. Either my memory falsified, or England is not the same land I left.

Indeed, America is a wonderful country and California the most wonderful of all. May I be forgiven for ever having had my doubts? Experientia Docet.

Profiteering in England is rampant and flagrant everywhere and progress seems nowhere in sight. No automobile production can be counted on until 1921, if then—worth speaking of.

The Cunard Company lost my baggage and it cost me $100 to recover it. They put me off at the wrong dock and in consequence it was midnight before I could find an icy cold room with damp beds to sleep in at $12 per night. But why labour the details—no wonder *sterling is going down. I certainly deserve all this. I needed it to make me thoroughly patriotic towards the country that I knew in my heart was the best on earth—even if it is dry. However, I still think total prohibition is too drastic.

When I return to California it will be for good—no more wandering for me. I am longing to get back to work. I shall see what I can do in the clinics here, but the winter is too severe to allow much research work in London. I can no longer stand the yellow fog.

Yours ever,
CECIL REYNOLDS.

*Before the war an English pound was worth four dollars ninety-eight cents, now it is worth less than four dollars.

EDITORIAL NOTES

Dr. Burns Stoddard Chaffee has located in Long Beach.

The physicians of Riverside have established a free clinic.

Dr. Roderick H. Shippey has been elected president of the harbor branch of the Los Angeles County Medical Society.

Dr. Louise Andrus, formerly of Honolulu, has located in Alhambra.

San Diego has established a city clinic for the treatments of drug addicts.

Dr. Wm. A. Swim of Los Angeles now has his offices in the Hollingsworth Building.

Dr. C. Benson Wood is now associated with Drs. Browning and Howson in the Merritt Building.

Dr. P. B. Exelby, formerly of Lansing, Michigan, has located in Los Angeles with offices in the Baker-Detwiler Building.

One out of every five doctors who completed their education in England in 1918, was a woman. There are now 2250 women doctors in the tight little isle.

Dr. Chas. E. Sisson, who left the Norwalk Hospital at the beginning of the war, is now back at the institution as assistant to Dr. W. B. Kern, the medical superintendent.

Major James Steinberg, after making a notable record in France, Germany and Russia, has been released from service, returned to Los Angeles and now has his offices in the Trust and Savings Building.

Reports of Dr. H. A. Sutherland on the progress of psychological work in the public schools and of Dr. Martha Hackett on the beginning of modern treatment of the insane in China were read at the meeting.

Health officers of California were notified today that lethargic encephalitis, commonly known as "sleeping sickness," is a reportable disease.

Within the last week six cases have come to the notice of the State Board of Health—three in San Francisco, two in Los Angeles and one in Vacaville.

The war history department of the California Hospital Survey Commission is soon to publish in pamphlet form a list of California casualties during the war. The names will be listed according to the nature of the casualty—killed in action, died of wounds or disease, airplane accident or in training camps.

Dr. J. F. Percy, the well known specialist of Galesburg, Illinois, recently delivered an address on Treatment of Carcinoma by the Percy Method of Cauterization, before the Los Angeles Surgical Society. We have heard rumors that Dr. Percy is so infatuated with the climate that he is considering locating in Los Angeles.

Dr. Robert M. Dodsworth, who had long experience in France, was the honored guest of the Harbor Medical Society at dinner in Long Beach on the evening of November 26th, 1919.

Dr. A. B. Austin of Long Beach, who served in France during the war and was mustered out at the Presidio, San Francisco, as Lieutenant-Colonel, has again been called to the service, and has been given a commission as Lieutenant-Colonel in the Regular Army.

The Psychopathic Association of California, at its recent regular meeting, elected the following officers: Dr. H. G. Brainerd, president; Judge Louis W. Myers, vice-president; W. S. James, secretary; board of directors, Franklin Booth, Judge Paul J. McCormick, Judge Sidney N. Reeve, Dr. Charles L. Allen, Dr. Ross Moore, Dr. E. H. Williams, Mrs. O. P. Clark, Mrs. Carry Parsons Bryant and Mrs. W. S. James. Mrs. Elizabeth Maw was elected corresponding secretary.

Dr. Chas. W. Fish, one of the best known physicians of Los Angeles, died at his residence on November 25th. The doctor had been ill for several weeks. He came to Los Angeles thirty years ago and has always held a highly respected position in the profession. He was a prominent Mason and a member of the Presbyterian church. He is survived by a widow and two sons. Dr. Fish was one of the founders of the Pacific Hospital. The funeral services were held at the West Adams Presbyterian Church and the body was cremated.

At the annual banquet of the Los Angeles Clinical and Pathological Society, held at the California Club, De-

cember 15, 1919, the society was addressed by Alonzo Englebert Taylor, M.D., Rush professor of physiological chemistry, University of Pennsylvania, Philadelphia. His subject being "The Effect of Prolonged Malnutrition on the Human Body."

There were one hundred at the tables and the large dining room of the California never presented a happier appearance. The speaker was appropriately flanked, to the right and to the left by past presidents of the society. Dr. E. W. Fleming, the president, conducted the exercises with dignity and felicity. The address was full of valuable information pertaining especially to the condition of the masses in Vienna and other places in Central Europe. At the conclusion Dr. Taylor was unanimously elected an honorary member of the society.

At the recent meeting of the Southern Medical Association, as reported in the journal of the A.M.A. Dr. Jere L. Crook, Jackson, Tenn., said: Surgery's outstanding gains, from the recent war, may be thus summed up: the Carrel-Dakin method of treating suppurating wounds; a revival of the use of debridement, first used extensively in the Napoleonic war; the treatment of shock cause by hemorrhage with blood transfusion by the citrate method, demonstrating the great superiority of blood over salt solution because the former has a real sustaining power and the latter is temporary only because osmosis soon carries it out of the vessels; the paraffin treatment of burns; improved methods in the treatment of fractures and the use of the Thomas and Blake splints and the Balkan frame; early mobilization of injured joints; management of lung injuries; improvements in plastic surgery, and re-education of the crippled.

BOOK REVIEWS

MORTALITY STATISTICS 1917. Eighteenth Annual Report. Department of Commerce, Bureau of the Census, Sam L. Rogers, Director, Washington Government Printing Office, 1919.

The present report presents mortality statistics returned from that portion of the United States known as the registration area. This area for 1917 includes all the states and cities which were in the area in 1916 and also the State of Tennessee, eight cities in non-registration states, and, for the first time territory outside of the United States, The Territory of Hawaii. The total number of deaths returned from the registration area of the United States, exclusive of Hawaii, and tabulated for the calendar year 1917 is 1,068,932, which includes 1,066,711 deaths of civilians and 2221 deaths of soldiers, sailors and marines, as reported to the Census Bureau by the state and municipal registration offices after the beginning of the war. The death rate is 14.2 per 1000 population, based on an estimate midyear population of 75,307,906 or 72.7 per cent of the total estimated population of the United States. This rate exceeds the rates for 1915 (13.5) and 1916 (14) and is higher than that for any year since 1911 (14.2).

	1915	1916	1917
California	13.7	13.5	13.9
San Francisco	15.9	15.4	15.2
Los Angeles	12.3	12.3	12.5

HUMAN PHYSIOLOGY. Including a section on Physiology Apparatus. By Albert P. Brubaker, A.M., M.D., LL. D. Professor of Physiology and Medical Jurisprudence in the Jefferson Medical College; formerly Professor of Physiology in the Pennsylvania College of Dental Surgery; formerly Lecturer on Physiology and Hygiene in the Drexel Institute of Art, Science and Industry. Sixth Edition. Revised and Enlarged, with 356 Illustrations. Philadelphia, P. Blakiston's Son & Co., 1012 Walnut Street. Price, $4.25.

The continued demand for this Text-Book of Physiology, which has led to the preparation of a sixth edition, has

enabled the author to once again revise and elaborate some paragraphs and sections, to eliminate others, and to insert such new material as seemed of value from the medical point of view. In addition to the topics inserted and revised in the recent fifth edition, viz: the electric currents of the heart and their graphic registration; animal heat; internal secretion; the autonomic nerve system, etc., revisions and additions have been made in the present edition to the paragraphs relating to the mechanisms by which changes in the arterial pressure are brought about; to the mechanism of carbohydrate metabolism, and to physiologic actions of the spinal nerves. Other revisions are to be found in many sections of the text. Several new diagrams illustrating the phsiologic actions of cranial nerves have been inserted. With these changes and additions, this edition will meet to a still further degree the needs of those for whom it is primarily intended, viz., the medical student and the general practitioner.

We are glad to find here a human physiology that is something more than a laboratory manual of veterinarian pharmacodynamics.

THE PNEUMONIC LUNG.

In an age when the written word runs into millions every year, fearless, indeed, is the writer who dares to produce "mere words". To hold a reading audience, facts and facts only are an essential and the portrayer of facts is the popular author of the day.

The physician, in his ever constant search for additional knowledge, is entitled to the best there is, and with this end in view a brochure, "The Pneumonic Lung", has been published in the belief that therein the discriminating physician will find some facts which will aid him in the pursuit of his professional duties. The text matter of this booklet is the result of long and exhaustive study of the literature on pneumonia in its different phases, and in its preparation the works of practically every standard author who has discussed internal medicine have been consulted. The clinical records of hospitals have been a source of information and confirmation; the most recent discussions on pneumonia in American, British and French medical journals have been perused, and no field which would yield information has been left untilled.

The illustrations have been painted especially for the accompanying text. The subject has been given the closest attention and study, and no opportunity has been neglected to attain the close pathological and anatomical touch so essential in bringing out the necessary details, thus adding to their practical value. Expense has been no factor in the production of this brochure. With the object of presenting to physicians a booklet which would refresh their knowledge of the etiology, pathology, symptomatology and treatment of a most destructive disease and in order that they might constantly have at their elbows an authoritative and most practical exposition of the subject, the authors have gone deeply into the matter.

Physicians may obtain, without expense to them, a copy of this interesting booklet by addressing The Denver Chemical Mfg. Co., 20-24 Grand St., New York City, N. Y.

The new motion picture, "SOME WILD OATS", on the venereal disease question has been released. This picture was made under the auspices of the N. Y. C. Health Department, and with the aid of the United States Navy, Recruiting Division. It is in seven reels, one of which contains propaganda, and the other six, a powerful love story, showing the ravages of the disease, how it is contracted, and the

solution for stamping it out of every locality. In one of the reels, Royal S. Copeland, health commissioner of New York City, is shown at work, and it also shows what his department is doing to eradicate this disease in New York City. All the authorities claim that "SOME WILD OATS" is a clean production, as it is so constructed that it does not offend anyone, but teaches a remarkable lesson—without preaching. It is the most recent picture on the venereal disease subject produced, being made by the authorities who condemned, "FIT TO WIN", "THE END OF THE ROAD", and "OPEN YOUR EYES", which they considered immoral, and prohibited their showing in the State of New York.

INTER-ALLIED TYPHUS COMMISSION IN POLAND

The Inter-Allied Medical Mission sent by the International League of Red Cross Societies to study the typhus situation in Poland has begun its investigations in Warsaw. This is the first step in the activities of the league which was organized to coordinate all Red Cross activities.

The Mission has had inspection trips, conferences with the Ministers of Public Health, Army Medical Officers, the American Red Cross Commissioner, and with municipal health officers. It took a week's trip to the southwestern front to study conditions in military regions.

The commission is composed of Col. Hugh S. Cumming, Chairman, Assistant Surgeon General United States Public Health Service; Lieut. Col. Aldo Castellani of the Royal Italian Navy Medical Service; Lieut. Col. George S. Buchanan, Medical Officer of Health of the Ministry of Health of Great Britain, and Lieut. Col. Visbecq of the French Army Medical Service.

SOUTHERN CALIFORNIA PRACTITIONER.

Vol. XXXV. LOS ANGELES, FEBRUARY, 1920 No. 2

BOILED VS. RAW MILK IN INFANT FEEDING.*

BY A. J. SCOTT, JR., M.D., LOS ANGELES.

The subject of artificial feeding is one which occupies much of the practice of pediatricians, and is one which more obstetricians should know about. The mother is looked after during the puerperium, but the infant is relegated to second place. If the mother has sufficient breast milk to nurse the child, all well and good. If not, or if some disease supervenes which makes breast feeding inadvisable, and a wet nurse is not available, the child must be fed by some other means. The question now arises, what shall it be? The first thought is cow's milk. Next, how shall it be prepared? The average man is simply lost when it comes to making up a milk formula for feeding a new born or very young infant. Holt, Rotch, Chapin, and all other pediatricians in their earlier works, and some even today, taught top milk formulae, cream percentages, lime water, sugar of milk, etc. All using raw milk. Then came the more simple formulae made from whole milk and water and a dextrin maltose preparation which was introduced and used extensively.

In Europe, especially France and Germany, on account of the unsanitary conditions surrounding milk production, and the scarcity of ice, the milk was boiled. In this manner and using the whole milk modifications the babies did well. They had no more scurvy or rickets proportionately so we are informed, than we had in this country.

In the J. A. M. A. for February 22, 1913, Dr. Jos. Brennemann of Chicago, reported some of his experiments with a man who could vomit easily. He used raw and boiled milk. In the Arch. Ped. February, 1917, he gives more experiments on the same individual, using both raw and boiled milk, top milks, etc. Both the articles in question are well worth reading in detail, but a brief abstract may be of interest.

One hundred experiments were performed over a period of several years. Brennemann emphasizes the following facts; "Cow's milk is not a liquid food, but a solid food—so solid, in fact, that in babies the curds found in the stomach often pass through the intestinal tract and appear in the stools as tough, hard, bean-like curds."

The summary of his experiments shows that raw milk skimmed, forms hard, rubbery masses, not easily broken.

*Read before the Los Angeles Obstetrical Society.

That with whole milk the masses are tough and leathery, but not to the same extent as skimmed milk. The use of top milk made the curds somewhat softer, but delayed digestion considerably. The use of boiled milk resulted in the curds being fine and more flocculent, no tendency to form masses as does raw milk. The length of time for complete emptying of the stomach was somewhat shorter in the case of boiled milk. Another very interesting point he noted was, that smaller curds of raw milk had a tendency to coalesce and form large masses. This feature was made use of in one experiment in which he had the subject sip one quart of raw milk over a period of 45 minutes, and 30 minutes later he tried to return the milk, but was able to get only the whey. Five hours later was unable to get anything more until he had used two glasses of water, then only got a few small curds. But during that period the subject complained of a "heavy feeling" in the pit of the stomach. The experiment was performed several times with the same results, then was done in an open dish, using Chymogen (a rennet preparation) gently stirring all the time, and over a period of more than an hour. The results were a complete coagulation into two large masses which could not be broken up. His conclusions were that this same process occurred in the stomach and that the idea of taking milk in small sips to prevent the formation of large curds in the stomach was fallacious, because the curds had some sort of affinity for each other and would form larger masses.

I have quoted this author extensively because he has done the most experimental work along this line. In our pediatric service we have had a child who "spit up" regularly after each bottle at varying intervals of time. The child came into our service at the County Hospital at the age of 2 weeks, and has been there so far 2 months. Up to 2 weeks ago she was fed on a boiled milk mixture, modified properly for age. She will start in a few minutes after finishing her bottle, and spit up varying amounts of food, merely a regurgitation, not a true vomit. We have noted the character of this vomitus with interest, as it has shown the character of the curds as they left the stomach. They were soft and flocculent as when mother's milk is used. There were at no time during the intervals between nursing when she regurgitated curds that were large or tough. The character of the curds of infants fed on raw milk has been noted by all of us many times, when such a child after a feeding has vomited or regurgitated. How often will a mother speak of the baby vomiting up the cow's milk "all curdled?" She will remark on how tough the curds were also.

On the other hand the character of the stools. You all have seen the whitish, or grayish, sometimes brownish stool-curd, which if you use a spatula to press out you will find as a rule tough and resistant. But the white bean-like curds of fat or soap will crush fairly easy. On the other hand, take the stool of an infant fed on boiled milk. We use the three-minute boiling in the majority of our cases. The stool will be a little lighter in color than that of the stool of an infant fed on mother's milk. There are seldom any large white fat curds, rarely any larger than a pea if the milk is properly adapted to the age nd weight of the child. There are no large protein curds, but the stool is soft and spreads easily as butter at room temperature. The odor as a rule where the child is taking care of its food properly will be slightly more acid than that of mother's milk.

Another thing noticed in the feeding of boiled milk, is that the child can take stronger milk than when it is fed raw.

You ask, how are we going to prevent the child developing scurvy or rickets when we are feeding a cooked milk, one which has all the vitamins destroyed? We use some fresh fruit juice, preferably orange, and we have given it to infants as young as one month, and never noted any untoward effects. In this manner we supply that bit of live food necessary to prevent any of the above mentioned conditions. Work has been done in the east in some of the hospitals on the use of pasteurized milk and they have noticed that children fed exclusively on such milk without fresh fruit juice or without soya bean flour or potato (antiscorbutics), that these children have many times developed either a modified form of scurvy or else a frank scurvy.

Now for a comparison between raw and boiled milk.

Raw milk contains certain enzymes necessary to prevent scurvy and these are destroyed by heating. These can be supplied by fresh fruit juices or beef juice or potato.

Raw milk forms tough, leathery, large curds in the stomach, many of which pass not completely digested through the stomach and intestines and are found in the stools.

Boiled milk forms soft flocculent curds, and the stool is softer and smoother.

Raw milk curds take more calories of heat from the child to digest than boiled milk, because the latter curds are smaller and softer.

Raw milk fat forms large soap stools, the curds of which are like lima beans, while the heating of the milk causes chemical changes in the fat and while a considerable amount is passed by the stools as evidenced by the smooth oily appearance, only in exceptional cases do we find the bean like masses.

The baby has to expend more energy as mentioned to handle any artificial feeding, but more is necessary for the raw than the boiled milk, and consequently the weekly gain in weight on raw milk is usually not quite so uniform as on boiled milk, all things being equal and proper modifications being made for age, weight, etc.

We used raw milk, top milk and percentage feeding for several years, and our babies did well we will admit. But with the advent of the use of boiled milk, while frankly we were skeptical as to its value over our old methods, we were open to conviction, and we have been using it almost exclusively for the past two and a half years, from the birth of the child up to about 7 or 8 months, when by using some of the cereals as supplementary feedings, we have gradually gotten the child onto raw milk. We do not want to convey the idea that we do not believe in the use of raw milk at all, but that in the cases of very young infants we believe they will do better, gain faster, and have fewer digestive disturbances upon the use of boiled than raw cow's milk.

We have had babies come into our ward as early as 2 days old. We had no mother's milk to give them, and our problem was to feed them so they would grow and be worthy citizens, and not have them sickly, puny individuals. Our weight charts have proven that we were correct in our theories. Not all do well, that is acknowledged, but the majority do. At another time I shall take up in detail our simple method of feeding infants, the feeding after the 6th month, and the rationale of our theories.

In conclusion, I wish to urge upon your consideration, the use of boiled milk, especially in the early period of life of the infant. I also wish you not to forget that you cannot feed cooked milk successfully unless you use some fresh fruit juices. These latter to prevent scurvy and possible rickets. That this boiling of the milk does not necessarily constipate, if properly modified, and the proper proportion of dextrose and malt sugar is used. That you are

conserving the infant's energy by the use of a cooked soft protein curd as against the tough raw protein curd. That you will have fewer digestive disturbances at the time when such are serious to the future welfare of the infant.

1501 So. Figueroa St.

DON'TS IN DERMATOLOGICAL DIAGNOSIS.

BY MOSES SCHOLTZ, M.D., LOS ANGELES, CAL.

1. Don't try to make a diagnosis on the general impression of the eruption, just because it looks like eczema, psoriasis, etc., but base it on the presence of definite clinical characteristic features, and on the study of individual lesions.

2. Do not be satisfied with the examination of the part of the body that a patient chooses to show you, but see all of it in doubtful cases. If you do not, you may miss the most characteristic patch and your clue to diagnosis.

3. Do not make any definite statements as to diagnosis under artificial light. The day light may completely reverse your opinion.

4. Do not call an eruption "eczema" unless most or all of the following clinical features are present: Irregular round or square shape, ill-defined borders, marked tendency of individual lesions to run together into patches, equal involvement of the central and peripheral parts, spreading by continuity, intense itching and absence of scarring.

5. Do not forget, whenever in doubt, about the possibility of the lesion being syphilitic. The following "specific" features suggest and, if present combined, clinch the diagnosis: raw ham dusky red color, serpiginous or kidney shape, deep induration or infiltration, absence of itching, comparatively rapid involution, tendency toward ulceration and formation of thin, soft, atrophic, wrinkled "cigarette paper" scars.

6. Do not venture a diagnosis on the scalp until you clean it up and take off the crusts to see the base of the lesion. A dirty insignificant looking crust may conceal a number of various conditions.

7. Do not overlok scabbies in your well-to-do patient. Scabies once in a while breaks into the best of society.

8. Do not wait for silvery white scales to diagnose psoriasis. The patient may have washed them off before coming to see you. The distribution and character of the base of the lesions will furnish enough for a safe diagnosis.

9. Do not take every red patch in babies on the buttocks and around genito-crural region for an intertrigo from soiling. If it is of a sluggish, dusky red color, of well defined borders and slightly infiltrated, it may be the only evidence of hereditary syphilis.

10. Do not depend in your dermatological diagnosis on the statements of the patient. In a majority of the cases, with a systematic checking up of clinical features and careful differentiation you can tell him more than he can tell you.

EDUCATION AND RECREATION IN THE ARMY.*

BY MAJOR-GENERAL WILLIAM G. HAAN, ASSISTANT CHIEF OF STAFF, AND IN CHARGE OF EDUCATION AND RECREATION WORK IN THE ARMY.

That education and recreation as applied to the new army has passed the experimental stage and is now a vital factor in the training of the soldier was shown at a convention of army educational officers, held at Camp

*Authorized by the Office of the Assistant to the Secretary of War; Service and Information Branch.

Zachary Taylor, near Louisville, Kentucky, on December 9, 10 and 11.

Early in the year, the War Department actuated by a deep sense of responsibility felt towards the millions of men brought into the service during the war, as well as by the astounding facts as to illiteracy and physical condition of the young men of the country as shown by draft statistics, and the excellent work done by the Commission on Education and Special Training, had conceived an army built up on a new plan. It was proposed to make the army not only a military force to be trained and ready in time of national emergency, but a great educational institution where young men of the best mental, moral and physical conditions, and with the highest ideals of patriotic citizenship would be produced.

This plan was realized, in a measure, when the Congress appropriated the sum of $2,000,000 to be devoted to this purpose during the fiscal year 1920. Accordingly, in September of this year instructions went forward to the commanding generals of all divisoinal camps and of territorial departments, who at onec appointed on their staffs, officers known as education and recreation officers to assume direct charge of the work. Each officer has associated with him at least one civilian expert in educational affairs, who furnishes assistance and advice in establishing schools and manual training classes.

But it remained for the Camp Taylor convention, called by the Secretary of War in order that the work in general might be co-ordinated and rough places smoothed out, to show that the army is now in reality a great training school where the mothers of our young Americans will be glad to see their boys go. This idea of the army as a vast university in khaki is admittedly hard to conceive, but nevertheless the thing has been accomplished right before our eyes.

No longer is the army merely concerned with the making of a recruit into an efficient fighting man, by giving him the prescribed system of military training only for a few hours of the day and leaving him almost entirely to his own resources for the remainder of the day. It now assumes the responsibility for the entire twenty-four hours of his day, and sees that every portion is gainfully spent in useful study or helpful recreation. In the soldier's life, education and recreation now have equal places with military training, and are definitely scheduled in the program of daily work.

All training, whether purely military or educational, has as its main object the development of the soldier's mind to make him a responsible thinking human being. Every soldier, however poorly he may be educated, or however limited his experience, has still a thinking mind, and that mind is active practically all the time. Such a man is perhaps incapable at the moment of looking at affairs in a broad sense, but the object of all training must be to guide that mind in the direction of right thinking. In order to accomplish this the instructor himself must be able to estimate about what are the channels of thought in the mind of the men being trained, in order that he may so conduct his own part of the work as to gain the confidence of the men he is instructing or leading.

In developing the soldier's mind the most rapid progress is made by placing upon the man, as early as practicable, as much responsibility as he can stand. This placing of responsibility on the man stimulates his pride, raises his self-respect, and urges him to better effort. This is applicable in all kinds of training. It is character building, frequently called moral training, and the most effective means of stimulating self-development.

Every soldier, down to and including the last recruit, will sooner or later

become a leader in a smaller or greater sense. In battle, as battles are now necessarily conducted, direct responsibility very frequently goes out of the hands of the officers, and small groups of men must accomplish objectives by themselves; hence leadership must be assumed by some or all of these men. Any one of them may be placed in a position where he must act independently and make his own decision on his own responsibility, which requires thinking and acting on his own judgment. It requires leadership. And it is to develop these latent qualities of leadership that this educational program has been inaugurated.

New recruits are inclined to look on their officers from the very beginning with respect and as thoroughly conversant with their duties. It is very important that this natural impression should be maintained and improved, but this cannot be done unless the leaders are in the habit of thinking correctly and justly in all matters, and acting accordingly. This is necessary to gain and maintain the confidence and respect of the men. When it has been fully accomplsihed, then most of the small difficulties disappear. There will be a high state of morale in the command, and wherever we find a high state of morale we always find a high state of discipline, instruction and consequent usefulness.

Officers of our future armies will be required not only to be thoroughly trained in a professional sense, but must also have that human quality which comes only through a real interest felt for the welfare of the men under their command. They must not only be military instructors to the men, but also their leaders in all sports and recreation. Experience of the larger colleges and universities has shown that a certain amount of sport and recreation is a necessary part of the student's life, and as the army is now a great university in every sense of the word, and each man composing it a student, recreational activity will be a part of its training. Here the army chaplain enters as an important factor in the handling by military means alone of all the camp activities formerly furnished by the Y.M.C.A., Knights of Columbus, etc., and the Americanization of aliens in the army.

Under the system of education now in force it is possible for men to receive instruction so as to fit them to be carpenters, blacksmiths, pharmacists, dental assistants, engine workers, mechanics, draftsmen, stenographers, truck gardeners, motor drivers, repair men, telegraphers, radio and telephone operators, etc. Such educational subjects as English, geography, mathematics, United States History and modern languages are also taught. Of course, at the present stage of the game it is not possible to give instruction in all subjects at any one camp or post, but so far as practicable, the desires of the enlisted man as to the courses to be taken by him will be met.

A certificate will be given by the local commanding officer or school officer to each man who successfuly completes a course, indicating that he has satisfactorily completed the course studied. A standard War Department certificate will later be adopted, and the possession of such a certificate by a soldier who has been discharged with a character of "Excellent" will be sufficient recommendation to a civilian employer as to the qualifications of the discharged soldier for employment.

On the other hand, it is highly important that the men themselves take the thing seriously and realize that the government is concerned not only in making trained soldiers of them, but also making of them self-supporting and self-respecting members of the communities to which they will return on discharge.

This work is unique in the history

of the government, and highly important in showing the trend of the army in facing the new problems developed by the world war. It will result in making the army in time of peace a more valuable factor in the life of the nation by producing men of best possible type, having a good general education, possessing a useful trade, but, above all, thoroughly trained in moral character and the duties and responsibilities of good citizenship.

INFLUENZA PREDICTION FULFILLED.

In the November 8 issue of the London Lancet appeared a prediction by Dr. John Brownlee, D. Sc., based on a careful study of past influenza epidemics, that a recurrence of the 1918 influenza epidmic would occur in January or February, 1920.

Doctor Brownlee found that influenza epidemics recurred at intervals of 33 weeks, providing the thirty-third week did not fall between June and December, in which case the recurrence would be expected at the end of 66 weeks or 99 weeks, and threfore he regards the fall epidemic of 1918 as an exception to the rule. In the United States we are now having a recurrence after 66 weeks.

It is now exactly 66 weeks since the mortality peak of the 1918 epidemic in Chicago. The same is true for New York City and Washington. In all three of these places influenza is now epidemic.

The periodicity suggests that we may be dealing with infecting organisms which not only have the power to reproduce themselves in a virulent form continuously for a long period if susceptible persons are exposed, but which also have the power of developing in cycles of 33 or 66 weeks.

The recurrence might be explained on the hypothesis that immunity has lasted 66 weeks, though this hypothesis does not explain the fact already noticed in some families that those attacked in 1918 are now immune, while those not attacked in 1918 are now contracting the disease. The more reasonable explanation seems to be that the present epidemic is due to a definite cyclical regrowth of the infecting organisms from the seed of the former epidemic.

Definite cycles of development are common in the known vegetable and animal world; some plants flower annually, some biennially; the malarial organism may complete its cycle in two or more days; the locust requires in some cases 17 years.

Similarly the organism responsible for our recent pandemic may complete its cycle in 33 weeks or perhaps 66 weeks. This recurrence of the epidemic after 66 weeks certainly strengthens the view that the epidemics of 1889, 1890, 1918, and 1920 all have a common etiology.

GOVERNMENT NEEDS PHYSICIANS

The United States Civil Service Commission announces that a large number of physicians are needed for employment in the Indian Service, the Public Health Service, the Coast and Geodetic Survey, and the Panama Canal Service. Both men and women will be admitted to examinations, but appointing officers have the legal right to specify the sex desired when requesting the certification of eligibles.

Entrance salaries as high as $200 a month are offered, with prospect of promotion in some branches to $250, $300 and higher rates for special positions.

Further information and application blanks may be obtained from the secretary of the U. S. Civil Service Board at Boston, New York, Philadelphia, Atlanta, Cincinnati, Chicago, St. Paul, St. Louis, New Orleans, Seattle or San Francisco, or from the U. S. Civil Service Commission at Washington, D. C.

Dr. H. H. McCoy, who was recently released from army service, has resumed his practice in Long Beach.

SOUTHERN CALIFORNIA PRACTITIONER.

A MEDICAL, CLIMATOLOGICAL AND SOCIOLOGICAL MONTHLY MAGAZINE.
This journal endeavors to mirror the progress of the profession of California and Arizona.

Established in 1886 by Walter Lindley, M.D., LL.D.
DR. GEORGE E. MALSBARY, Editor and Publisher.

Associate Editors,
Dr. Walter Lindley, Dr. W. W. Watkins, Dr. Ross Moore, Dr. George L. Cole,
Dr. Cecil E. Reynolds, Dr. William A. Edwards, Dr. Andrew W. Morton,
Dr. H. D'Arcy Power, Dr. B. J. O'Neill, Dr. C. G. Stivers,
Dr. Olga McNeile, Dr. W. H. Dudley, Dr. J. M. Mathews.

Address all communications and manuscripts to
EDITOR SOUTHERN CALIFORNIA PRACTITIONER,
Suubscription Price, per annum, $1.00. 1414 South Hope Street, Los Angeles, Cal.

EDITORIAL

DOCTOR LETTSOM .

John Coakley Lettsom, M.D., F.R.S. (1744-1815) was the great Quaker surgeon in London during the time of Dr. Samuel Johnson, Goldsmith, Garrick and Sir Joshua Reynolds, with all of whom he was on terms of friendship. In America he was an honorary member of the Philadelphia Literary and Philosophical Society. On July 8, 1800, he was elected honorary member of the New York State Medical Society and was sent a certificate of the same "handsomely written upon vellum." Besides a large number of contributions on technical subjects, he wrote upon medical history and philoso phy. He wrote a life of John Fathergill.

He was a man of high ideals and benevolence and his name during his active life was found associated with nearly every measure inaugurated in London for the public good.

Lettsom, in his daily activities 1773-1815, used three teams of horses and earned from $25,000 to $50,000 per year. He was an LL.D. of Harvard.

DIVINE HEALING.

As we go to press, James Moore Hickson, a church of England layman, is drawing large classes at the St. Paul Pro-Cathedral, the leading Los Angeles Protestant Episcopal Church and also at All Saints' Church in Pasadena and at St. James Episcopal, South Pasadena. Mr. Hickson claims to heal physical ills and give relief to troubled souls.

The Los Angeles Times publishes interviews with a number of clergy those of the Episcopal church, generally endorsing Mr. Hickson's work. Dean William MacCormack of the St. Paul Pro-Cathedral says: "I believe that all the healing is divine, whether it be accomplished by a doctor of medicine, a priest, or anyone else."

Rev. H. C. Shaffer, pastor of the First United Brethern Church of Los Angeles says: "I believe in combinations, trust the Lord and keep your bowels open."

Dr. Charles E. Locke, pastor of the First Methodist Episcopal Church, makes a most sensible statement. Dr. Locke is always sane in his outlook on

questions of public interest. This statement of his which we quote in full, should be put in the hands of every intelligent citizen.

"I believe I am safe in saying that neither the First Methodist Church nor Methodism as a denomination will ever indorse any movement which aims at the healing of afflicted persons by drugless means or purely through the power of prayer. The Methodist church, too sane to discount the science of the centuries, believes in materia medica, in surgery and in inoculation for disease, while at the same time we are convinced that all healing is divine.

"The truth is that even the brain of the physician is a part of nature, through which God works. The profession of the doctor or the surgeon is as sacred as that of the minister, and, while physician and minister should co-operate in their efforts to relieve the world's distress, the two professions are distinct and should be so recognized. I might pray all day for my evening meal, but if I did not get out and work, all my prayers would not bring my supper—and shouldn't. The Lord never performed a miracle that He did not employ both human instrumentality and the forces of nature. I hope I will not be misunderstood. I believe in the power of prayer, but prayer consists in something more than words. To really pray for anything means to desire it so ardently, that one is willing to make an effort on his own part to obtain it. In the Methodist church we pray for the afflicted, but we first try to see to it that the patient is attended by a good doctor, and that the food and environment of the sufferer is all that it should be. Three-fourths of the people who are sick are ill only in their minds, and in such cases it is the mind which should be ministered unto, but it is to be deprecated that such a host of fakers and so-called 'divine healers' are allowed to pose on the credulous and rob them of hard-earned money when all the patients need is a little cheering conversation and a little confidence in the goodness and power of Almighty God."

LAENNEC—THE STETHESCOPE'S INVENTOR.

Dr. S. Adolphus Knopf of New York has a most interesting sketch of Rene Theophile Hyancinthe Laennec in the Medical Record, December 27, 1919.

This great scientist was born in Brittany, France, February 17, 1781.

The one most important event in Laennec's short but remarkable life was the discovery of the stethoscope, of which he wrote:

In 1816 I was consulted by a young person who was laboring from the general symptoms of a diseased heart. In her case percussion and the application of the hand (what modern doctors call palpation) were of little service because of a considerable degree of stoutness. The other method, that namely of listening to the sounds within the chest by the direct application of the ear to the chest wall, being rendered inadmissible by the age and sex of the patient, I happened to recollect a simple and well-known fact in acoustics and fancied it might be turned to some use on the present occasion. The fact I allude to is the great distinctness with which we hear the scratch of a pin at one end of a piece of wood on applying our ear to the other.

Immediately on the occurrence of this idea I rolled a quire of paper into a kind of cylinder and applied one end of it to the region of the heart and the other to my ear. I was not a little surprised and pelased to find that I could thereby perceive the action of the heart in a manner much more clear and distinct than I had ever been able to do by immediate application of the ear.

From this moment I imagined that the circumstance might furnish means

for enabling us to ascertain the character not only of the action of the heart, but of every species of sound produced by the motion of all the thoracic viscera, and consequently for the exploration of the respiration, the voice, the râles, and perhaps even the fluctuation of fluid effused in the pleura or pericardium. With this conviction I forthwith commenced at the Necker Hospital a series of observations from which I have been able to deduce a set of new signs of diseases of the chest. These are for the most part certain, simple and prominent, and calculated, perhaps, to render the diagnosis of the diseases of the lungs, heart, and pleura as decided and circumstantial as the indications furnished to the surgeon by the finger or sound, in the complaints wherein these are of use.

As Walsh very justly said, when relating this important event as described by Laennec himself, "This is the unassuming way in which Laennec announced his great discovery."

After three years of constant and careful clinical research work, Laennec published his book on mediate auscultation, the full title of which is "L'Auscultation Médiate, ou Traité du Diagnostique des Maladies des Poumons et du Coeur, fondé principalement sur ce nouveau moyen d'exploration." A second edition appeared in 1826, and the first English translation came out in the same year.

Six months after the second French edition of his work appeared Laennec passed away in his native town on August 13, 1826, at the age of 45, the cause of his death being due to pulmonary tuberculosis. Laennec, twenty years before his death infected his finger while examining some turberculous vertebrae. This was followed in eight days by a small roundish tumor which exhibited internally a firm yellowish consistence in every respect—like a crude tubercle. Laennec was profoundly religious and a devout Catholic.

BOTULINUS POISON NEVER PRESENT IN SOUND FOOD.

Food Officials Warn Consumers to Watch for Signs of Spoilage in Food.

Botulinus poisoning, which recently killed six in one family in New York, is caused by eating spoiled food infected with the bacillus botulinus, say the officials of the Bureau of Chemistry, United States Department of Agriculture, who have investigated this and other poisoning cases in connection with the enforcement of the Food and Drugs Act. In the New York case death was caused by botulinus poison in ripe olives. The olives remaining in the bottle in this case had an offensive odor. The same condition was found in the food in other cases investigated by the department. All spoiled food does not contain this poison, but any spoiled food even though the spoilage be slight may contain it. and for this reason, say the officials, all food showing even the slightest unnatural odor, unnatural color, swelling of the container, signs of gas, or any evidence of decomposition whatever, should be discarded.

The Department of Agriculture has used every possible effort and gone to the limit of its legal authority to remove all dangerous foods from the market by seizure under the Food and Drugs Act, say the officials. Each time when botulinus poisoning has occurred food inspectors have traced through the channels of commerce the batch from which the poisonous food came and have used all measures under the law to remove it from the market. Samples from all other brands put out by the packer have been examined. Since the law authorizes seizure in such cases only when the foods are actually found to be decomposed or to contain poisonous ingredients, since only an occasional package in millions is infected with bacillus botulinus, and since it is physically possible to open and examine

but a comparatively few of the millions of cans entering interstate commerce, it is beyond the power of the authorities to protect the public completely. For this reason they emphasize the necessity for scrupulous care on the part of persons opening and serving foods to discard anything which is spoiled. In products not obviously spoiled, if there is doubt in the recognition of the odor proper to the product, thorough cooking will remove the possibility of danger from botulism. If spoilage is apparent, destruction is recommended by the specialists.

Nobody knows just how the bacillus botulinus gets into any particular food. It has been found in articles put up in the home by the careful housewife and in goods packed in commercial establishments. It may be present in a few packages only of any lot. There is no method, the officials say, by which the packers or home canners can assure themselves by casual examination before canning that the product does not contain the bacillus botulinus.

If the food were in all cases properly sterilized and perfectly sealed the development of the poison would be impossible, but no method of preserving food has yet been found, the specialists say, that eliminates the occasional spoiled package. Failure to sterilize may not become apparent for weeks or even months after the canning of the article. If signs of spoilage have appeared when the can is opened, it is clear warning that the product is no longer edible. There is no greater probability of botulinus poisoning in olives than in many other food products either commercial or domestic. Until this year it has been more commonly found in string beans, asparagus and the like. It was originally found in sausage. It has been found in cheese; it is present sometimes in stock food, such as moldy hay and other kinds of spoiled forage, but it has never been found in the department investigations in any kind of food that was not spoiled.

EDITORIAL NOTES

More than 2000 physicians are registered in the city of Los Angeles.

Dr. Fletchin G. Sanborn, has been elected city health officer of Arcadia.

Dr. C. R. Lane, formerly of Fitchburg, Mass., has located in Santa Ana.

Dr. Colin C. Owen has located in San Bernardino and Rialto with offices in both places.

Dr. J. T. Thomas of Santa Ana recently received severe injuries in an auto accident.

Dr. Robert O'Neil has entered in practice with Dr. Saylin, formerly of San Gabriel and the two doctors have located in Venice.

Dr. W. P. Ballance, aged 67 years, dropped dead at his office in Los Angeles Harbor on December 21, 1919.

Col. L. Lore Riggin, Medical Corps, U. S. Army, has returned from France and resumed practice in Pasadena.

The Orange County Medical Association have issued a new schedule of fees, increasing rates all along the line.

Major J. M. Downs, has been released from service and has located for the practice of his profession in Los Angeles.

Dr. Rex Duncan, the well known radium expert of Los Angeles, addressed the annual convention of the South-

western Medical Association at its recent meeting in El Paso.

The Medical Society of the State of California will hold its annual convention in Santa Barbara, beginning May 11th. 1920.

Dr. D. W. Stewart, aged 83 years, who had been a resident of Los Angeles for over 20 years died at his home on Dec. 31st, 1919.

Dr. E. O. Sawyer, former county physician of Los Angeles County, has resumed practice, with offices in the International Bank Building.

Dr. J. A. Reilly, medical superintendent of the State Hospital at Patten, has been unanimously re-elected as the executive head of that institution.

Dr. Feldman, formerly of Los Angeles, died suddenly January 29th at his home in Marysville. He was released from the navy three months ago.

Dr. Amsden E. Wheeler, 65 years of age, died at his residence in Los Angeles on December 12th. Dr. Wheeler was a highly respected homeopathic practitioner.

Dr. Emil G. Beck of Chicago delivered an address on the evening of February 9th before the Los Angeles Surgical Society, subject, "The Balance of Power in Immunity."

After his long and eminent service in the army, it is a delight to again have Dr. W. W. Roblee of Riverside reading and discussing papers before the Medical Society.

Dr. Henry G. Westphal, medical superintendent of the Glendale Sanitarium, has returned after an absence of several weeks, devoted to post-graduate work in the East.

A Women's Medical Society has been organized in San Diego with Dr. Charlotte Baker, president; Dr. Marjory Potter, vice-president; Dr. Marian Kyle Larson, secretary and treasurer.

Dr. Verdo V. Gregory and Dr. James A. Ramsey of Hemet have established a hospital in that city. It is situated on a most sightly point and very fittingly named the "Hill Crest Hospital."

Dr. A. E. McDowell has located in Glendora. Dr. McDowell is a graduate of the Northwestern University of Chicago and has just been released after two years' service, from the army.

Dr. Earl Mendum Tarr, formerly of the firm of Brown, Sweek, Fahlen and Tarr, has located temporarily in the Physician's Building, suite 25, No. 125 West Monroe Street, Phoenix, Arizona.

Dr. H. W. Head, age 80, died in Santa Ana on Dec. 6th. Dr. Head was a pioneer in Southern California, and had served as a member of the State Legislature, being a leader in the Democratic party.

Dr. W. B. Kern, medical superintendent of Norwalk State Hospital has tendered his resignation to the board of managers to become effective March 1, 1920. Dr. Kern has been a storm center for some months.

Dr. F. E. Walker of Long Beach has been very ill due to an infection of the hand that occurred while operating. He is now steadily regaining his health.

A movement is on foot in Santa Ana to secure an endowed municipal hospital.

Dr. Lyle H. McNeil has filed suit for divorce. His wife, Dr. Olga McNeil, is charged with desertion. The Doctors McNeil both stand well in the profession in Los Angeles, and we understand it is simply a matter of incompatibility.

At the annual meeting of the harbor branch of the Los Angeles County Medical Society, held in the Hotel Virginia, Long Beach, Dr. J. F. Percy, the

eminent surgeon of Galesburg, Ill., read a paper entitled, "Medicine of the Future."

Dr. Edwin Howe, 91 years of age, died in Los Angeles on Dec. 29th. He had been a practicing physician for more than 60 years.

Dr. Howard W. Seager of Los Angeles, who was major in the service in France, has finally received his discharge and resumed practice.

On the evening of December 2nd members of the Tri-Counties Dental Association, and the San Bernardino County Medical Society, dined together at the Elks' Clubhouse in San Bernardino. The dinner was followed by a discussion of "Focal Infection."

Dr. Robert K. Macklin, after strenuous service in the Medical Corps of the U. S. Army has returned to his home in Pasadena. During his stay in France he was in the thick of the fight and received a serious injury to his left hip. He hopes to be entirely well in two or three months.

Dr. Earl Moody announces that he has returned from military service in France and has opened offices at 3413½ South Vermont Ave., near Jefferson St. Office telepohne, 77341; residence telephone, Wilshire 50. Dr. Moody was a captain in the army and is one of our most able and dependable young practitioners.

A telegram from Paris dated Dec. 31st, 1919, says that a paper was read before the Academy of Science, by two leading French biologists stating that men and women are living longer nowadays and that one person 60 years of age is worth 2 medieval men in their twenties. A recent census shows that there are 70,000 centenarians living.

At the annual meeting of the Riverside County Medical Society, the following officers were elected: President, Dr. Bon O. Adams; vice-president, Dr. Arthur L. Brown; secretary-treasurer, Dr. Paul E. Simonds, who was also named as delegate to the State Medical Society with Dr. W. B. Rolph as alternate. Dr. John C. King of Banning read a paper on the early diagnosis of pulmonary tuberculosis.

Dr. Walter M. Dickie of Los Angeles has been appointed director of the bureau of Social Hygeine of the State Board of Health. Dr. Dickie says that he will be immediately concerned with the establishing of the bureau with the idea that most of its efforts will be devoted to health, educational work and to social betterment activities. The local headquarters are at 214 Union League Building, corner 2nd and Hill Sts.

Dr. Raymond T. Francis of Oxnard and Miss Evelyn Maria Warren of Northampton, Mass., were married on January 14th. The doctor is a practitioner in Oxnard, and the bride is a graduate of Smith College and the Rockefeller Institute for Medical Research. She was formerly chemist for Dr. Elliot P. Joslin, professor of medicine at the Harvard Medical School and later associated with the Memorial Laboratory and clinic of Santa Barbara.

Dr. F. B. Whitmore of Pasadena, recently returned from Siberia, where he served with the rank of captain in the medical department of the army, has received his commission as major in the Medical Reserve Corps, and is subject to orders for active service. A severe fall during a charge in Siberia resulted in serious injury to his back and he has not completely recovered from the effects, but he expects soon to be well and normal.

MISCELLANEOUS

Bulletin No. 180.
February 2, 1920.

Care of Influenza and Pneumonia Patients: Standards Outlined by Senior Attending Physicians, Los Angeles County Hospital, Feb. 1, 1920.

A. **General Instructions to Internes:** Internes are instructed to telephone promptly and as frequently as may be necessary to the attending physicians, bearing in mind that the hospital holds the latter responsible for everything that happens or does not happen to the patients assigned to them, and that the principal aim of the hospital is to mobilize and place at the disposal of the attending staff the necessary beds, internes, nurses, equipment, etc., to enable the attending physicians to discharge this great responsibility with complete satisfaction. Complete and intelligent co-operation with the attending physicians by the interne is what is sought and such teamwork should be beneficial to both since it enables the attending physician to give the satisfactory service that he wishes to give and trains the interne in the methods that have proven successful in the hands of distinguished practitioners.

The guiding principles followed in outlining the treatment as below have been: first, conservation of time and strength of nurses and internes wherever possible without materially jeopardizing the welfare of the patients; second, to cover the initial period of the patient's stay in hospital until the attending physician could individualize treatment to meet special indications, if any, not adequately covered by the following instructions:

B. **Special Instructions to Internes:** to be interpreted in the light of the preceding General Instructions and which may be countermanded in individual cases by specific orders from attending physician or chief resident physician on duty.

1. **Protect the patient from all draughts and chilling:** do not use the outdoor, or open porch treatment unless specifically ordered; keep the room warm (65° to 75° F.) and ventilated but free from draughts; avoid long and repeated physical examinations and during examinations use a minimum exposure of the patient; bring porch cases indoors for examination; clinics on these cases which include their physical examination will be permitted only when specially authorized from this office. No ice bags will be used unless specifically ordered. There will be no bathing of the patients for any purpose unless specifically ordered by the interne; no alcohol rubs or camphorated oil rubs will be used. Don't be alarmed at patient's temperature unless it is 105 or over; then an ice bag to the head is permissable, also cracked ice by mouth and a cold or ice water enema may be ordered.

2. Take temperature, pulse and respiration bid only, unless otherwise ordered, but in taking the respiration count it for a full minute.

3. Keep patients absolutely confined to bed and require them to use a bed pan until temperature has been normal for 3 days.

4. Use pneumonia jacket in all cases.

5. Use no Sinapisms unless specially ordered by interne or attending physician.

6. Give as a routine laxative 1 or 2 C. C. pills on admission unless contraindicated (necessary orders to be given by interne in each case.)

7. Crowd water and get each patient to drink 2 quarts per day if possible; hot water preferred especially if patient be nauseated; if taste of water is objectionable to patient add lemon

juice, orange juice or a few grains cream of tartar to flavor.

8. Give liquid and soft diet urging all to take hot coffee and tea: have it hot.

9. For cough, interne may order:

1. Medium sized mustard plaster to be applied over upper sternum.
2. One 5-grain Dover's powder: repeat once if necessary. (Nausea does not contraindicate).

10. **For Pain:** interne may order a hot water bag; also in some cases a snug binder about chest, which may give relief.

11. **Whiskey, Opiates, Codein, Aspirin** and other **Coal Tar Derivatives:** these are not to be ordered even by the interne unless specifically directed by the attending physician or chief resident physician on duty.

12. **Emergency Stimulants:** may be ordered by interne.

a. Camphorated oil, **sterile,** M. XV, instramiscularly; repeat p.r.n when ordered by interne.

b. Caffeine sodium benzoate, grains iii ss, subcutaneously; repeat p.r.n. when ordered by interne.

c. Digalen, M. XV, intravenously. Be sure solution is kept sterile.

13. **Digitalis:** It is possible to do damage with this drug by overworking a myocardium that is undergoing toxic degeneration. The interne in the absence of attending physician may order digitalis at his discretion for not to exceed 48 hours. Except as thus pro vided and as provided under 12 above, digitalis will only be given on the order of the attending physician. Fresh infusion of digitalis can be secured each day from the pharmacy. In nauseated patients, digalen intramuscularly (painful) or intravenously is recommended. (Average intravenous dose, M. XV; may be repeated at intervals of 6 or more hours.)

14. Serums are not favored; routine sputum typing will not be done, but sputum will be typed in special cases when requested by the attending physician. The hospital will assist attending physicians to secure serum from convalescent patients when especially requested by them.

15. Vaccines; Rosenow's prophylactic mixed vaccine treatment will be given in all cases.

(a) 8 minims **Subcutaneously** on admission.

(b) 16 minims **Subcutaneously** 48 hr. after admission.

(c) 24 minims **Subcutaneously** 96 hr. after admission.

16. Efforts will be made to provide "Amervenol" (Hille) for critical cases if ordered by attending physician. (Usual dose M. XVI intravenously or intramuscularly.)

C. **Instructions to Nurses:** Head nurses and those temporarily in charge of wards will be responsible that all nurses have read and have had explained to them the preceding rules. None of the p.r.n. orders are to be given at the discretion of the nurse.

(Signed) NORMAN R. MARTIN,
Superintendent.
By N. N. WOOD, M.D.,
Medical Director.

SIDE LIGHTS ON CASCARA.

Physicians frquently refer to Parke, Davis & Company as the cascara house —for it was this company which introduced Cascara Sagrada forty-three years ago. Cascara was unknown to the medical profession until Parke, Davis & Company—with the assistance of prominent physicians, chemists, botanists and pharmacologists—studied the drug and definitely established it as a therapeutic agent.

Cascara immediately sprang into popularity with physicians. It became a subject of discussion in medical meetings—not only in this country but on the other side of the Atlantic. It was directed to the attention of the British Medical Association at a conven-

tion in Cork, Ireland, as early as 1879. It wasn't long before cascara was being prescribed by medical men all over the world. Today the drug is recognized by every pharmacopoeia except the Finnish and Portuguese. It has come to be looked upon as an essential in medical practice.

Fluid Extract of Cascara (P. D. & Co.) is an ideal product. It contains all of the tonic-laxative constituents of two-year-old bark of **Rhamnus Purshiana,** the true cascara. The dose is about one-half that of ordinary fluid extracts of cascara.

Cascara Evacuant, another notable cascara product, is a palatable preparation of two-year-old bark of **Rhamnus Purshiana.** Cascara Evacuant is about twice as active as the ordinary "aromatic" cascara.

THE ROCKEFELLER INSTITUTE.

The Rockefeller Institute for Medical Research has received the following letter from Surgeon General W. C. Braisted, in charge of the Bureau of Medicine and Surgery, United States Navy, regarding the work of the institute in connection with the War Demonstration Hospital at Avenue A and East 64th Street:

"The Bureau has had official reports from the commanding officer of the Naval Base Hospital of the services rendered by your hospital during the world war, and of the great assistance afforded by your staff, including doctors, nurses, and empolyees, in the care of the sick and injured officers and enlisted men of the Navy and the Marine Corps.

"The period during which this assistance was rendered covered not only the active period of the war but extended beyond the date of the signing of the armistice; the help given was of such a character as to indicate a high standard of efficiency throughout your institution both as to personnel and equipment; and the arduous duties performed so cheerfully mark the loyalty and patriotism of all concerned.

"With a full appreciation of the valuable aid rendered in meeting that part of the war situation which fell to the lot of the Medical Department of the Navy, the bureau desires to extend to you its sincere thanks for your assistance."

BREATHING ROCK DUST.

Over 200,000,000 tiny particles of dust, as sharp as ground glass, are breathed into the lungs and air passages with every cubic foot of air in some of the factories in the United States, according to a survey made by the Public Health Service here.

Such dusts breathed into the lungs are never expelled. Photomicrographs show the tiny particles to be exceedingly sharp and jagged and chemical tests prove them to be practically insoluable. Work under such conditions invites respiratory diseases and makes a real health hazard. Similar investigations in chemical factories showed that laborers were frequently exposed to poisonous fumes and gases.

The investigation was made at Niagara Falls because plants were engaged in the manufacture of abrasives, chemicals, gases, electrodes, carbons, metals, and alloys. In all of the factories the laborers were found to be exposed to dangers which would eventually incapacitate them for further work. Fortunately over 60 per cent. of the labor in these plants seeks new em ployment monthly and the result of exposure to such dangers is not evident as it would be if the workers remained at the same work for longer periods.

As a result of the survey industrial hygiene engineers devised means of removing the dust from the air and minimizing hazards from fumes and poisonous gases. In spite of the fact that the installation of such devices was expensive, factory managements immediately put them into use.

SOUTHERN CALIFORNIA PRACTITIONER.

Vol. XXXV. LOS ANGELES, MARCH, 1920 No. 3

BIOLOGICAL ASPECTS OF LAUGHTER.

BY CECIL E. REYNOLDS, M.D., D.P.H., M. R. C. S., ENG., LOS ANGELES.

In a previous paper*1 I stated that egotism is the root of all social evil. This included so wide a range of qualities as "crime, miserliness, greed, eccentric and egocentric paranoia, psychosis, psycho-neurosis, sex perversions, etc.: in which was traced a conflict between egotism and the social instinct. Doubtless great advantage can accrue to the herd by the departure of certain exceptional individuals from its traditions but that subject has been exhaustively dealt with by my friend and former tutor, Mr. Wilfrid Trotter*2.

I will now deal briefly with one outward and visible sign of deep biological significance by which the soul of man can often be read, since I have been unable to find any treatise on the subject that was biological rather than physiological. Even Darwin*3 and Sherrington*4 avoid the clinical aspects of laughter and its diminutive smiling.

It is fairly certain that the act of laughing or of weeping could be initiated by the basal ganglia in a decerebrate man, in fact most neurologists have seen cases of profound degeneration of the cortex, whose only means of expression consists of periodical automatic outbursts of what is hard to distinguish as laughing or weeping, but is certainly one or the other or both. But I believe that one is rarely justified in diagnosing laughter emanating from a person with anatomically intact cerebral hemispheres as being due to lack of inhibition and nothing more.

Apart from its physiological mechanisms, laughter is an expression of an emotion. To say that it expresses pleasure is obviously insufficient since simple pleasantness is not an emotion, but plain effective feeling. A certain amount of realization or noetic consciousness must be added to the effect to make the result of the stimulus an emotion. In the case of laughter it is always an expression of a sense of triumph in the cerebrate individual just as blushing indicates a sense of shame, conscious or subconscious. This sense of triumph may be justifiable or unjustifiable, real or fictitious.

It is a direct outcome of the dawn of gregarious habits, and therefore we must study it as it exists in the prototype of our early ancestors, the ape,—not paying so much attention to observations of the smaller apes in cap-

tivity as to the more veridical reports of hunters concerning the large apes in the wild state.

It is highly probable that the largest apes, after overcoming an enemy in mortal combat, give vent to a loud roar and drum upon the chest. I have been told that this roar is interrupted and staccato. The drumming has long been regarded as a summons to the mate, and we know that the baying of a foxhound serves to summon the rest of the pack. Now our early simian ancestors were almost certainly, like man, more carnivorous than modern apes and if we grant this, they certainly hunted their prey in packs.

Let us picture to ourselves in times of scarcity a herd of these savage gorilla-like beasts ranging the forests in search of prey, and one stalwart fellow outstrips the pack and falls upon some unsuspecting fawn. If he follows the line of least resistance he will overgorge himself in solitude and not only will the pack suffer but the individual as well. Consequently nature steps in with an integrative process and the instinctive emotion of triumph temporarily overcomes the instinctive feeling of hunger. The emotion of triumph brings about a complex physiological act. The head is thrown back, the mouth is opened and the front teeth bared, and with quivering lower jaw a loud staccato roar is emitted. At the same time the eyes are tightly closed. This state is prolonged in direct proportion to the magnitude of the triumph and not only summons the pack to share in the triumph, but closes the individual's eyes to the immediate temptation.

Hence this physiological complex is co-operative and altruistic as well as self-preservative.

If, therefore, we regard laughter as coming from a primitive root of such prime necessity to the gregarious animal, it is worthy of the closest study as an expression of triumph and as a summons for mutual benefit. Observation bears this out in every particular.

Average normal laughter today expresses a triumph over primitive, instinctive and deleterious conditions, and summons other individuals to an appreciation of the current standard of morality, sanity, and what is held by the majority to be truth, whether it really be so or not.

As pointed out in a previous paper, much of the laughter that men expend over well known screen comedians is due to the superiority they feel towards the antics of the figures on the screen and to the various reactions to the many situations. These situations are so punched over that few individuals are incapable of appreciating the superiority of most men over such reaction and their pleasure in this sense of triumph is enhanced by the fact that they had to expend very little effort of thought to arrive at such a pleasant feeling of self-satisfaction.

Primitive instincts have been so hard for us, as a race, to combat in ourselves, that it is a real source of pleasure to see a figure of fiction yield to what is no longer any effort for us to avoid, so long as the result depicted is not too serious in its consequences. However, as one would biologically expect, the funniest things are situations that we barely feel superior to and what we might conceivably fall prey to if unwary but in regard to which we know better. We laugh at the comedian when he is unwise, we laugh with him when he triumphs over someone else in some unexpected fashion.

Of the varieties of laughter met with in daily life we often see in both the intellectual and the pseudo-intellectual what may be termed the "deprecatory laugh". This indicates that he feels a little ashamed to express triumph over such a comparatively simple situation, but he feels it due to confess that he

is glad evolution has progressed so far and will indicate the same to you by a cross between a smile and a chuckle; any greater expression would be unworthy and would indicate self-satisfied abandon where there are so many other conquests of self to be made. The opposite of this is the ''boisterous laugh'',—usually of the fat and animal type of man and may be very cheering so long as you are in agreement with him, but the boisterous laughter is apt to be just as animally ferocious when he is in disagreement with the herd.

The unkind or ''scornful'' laugh of the self-satisfied being is directly intended to express triumph over another individual usually of the same species, and hence is not co-operative and is really a perversion. It is at best an effort to bring the person laughed at into the particular group of thought of the laughter, and is a dangerous symptom since that group may be a group of one as occurs in ''paranoiac'' laughter which is familiar to alienists as an expression of self-superiority to all other individuals. The peranoiac may have a group of kindred spirits somewhere but not within these three planes of space, for paranoiacs do not even agree amongst themselves.

The ''hysterical'' laugh is very familiar. In its milder forms it sometimes begins by the patient joining in with others about some ordinary joke but continues after the rest have ceased laughing. It soon attracts the attention of the others and some recommence laughing a little and others pat the hysteric on the back and tell him to ''cheer up''; but the hysteric continues to laugh in ever higher and higher key and the sense of triumph within him extends from that over the original situation that was agreed upon by the rest, to embrace a fictitious sense of triumph over all his inward conflicts and complexes. This is subconscious. I have occasionally seen this in hysterical young men elated at being admitted to the boisterous society and at times alcoholic aids of ''really devilish fellows''.

Often the hysterical laugh begins without apparent cause or in response to a situation that should produce anything but laughter from the viewpoint of the bystander, especially in women. It is not correct to say that this is merely an overflow of dammed up emotional energy and leave it at that. If it has not a meaning in the conscious it has in the subconscious. As pointed out in my paper referred to, if a surcharge of energy in the affective consciousness is discharged direct and wholesale into the motor system without any intervention of the noëtic consciousness, the patient has a fit which may be indistinguishable from true epilepsy; and if the energy is similarly discharged in driblets the appearance may be that of ''tic''. Also it was stated that an emotion might be expressed as an unpleasant feeling from the urge to act or a pleasant feeling from action commenced plus a varying quantity of knowledge that has a direct relation to the aforesaid pleasure or displeasure, and there is further added a variety of visceral sensations which vary in intensity inversely with the capacity for motor reaction, and enhance the urge to act. This is the clearest expression of emotion that I can arrive at by introspective method. Hence in every emotional situation the subject must have some sort of realization, and hysterical laughter, however foolish it appear, has a meaning and is not an unshaped discharge of energy at random. It means sometimes that in the patient's mind there is an illusory sense of triumph over conditions that, in fact, the patient is totally unable to react to rationally. It, therefore, is a method used by the weak and those practiced in day dreams for

converting, by self-deception unpleasantness into pleasantness.

Since the patient cannot possibly experience artional pleasure of triumph over the situation, she produces the expression of triumph in vigorous form so as to experience the sensations that cannot come through fact in the hope of producing thereby a state of triumphal consciousness.

Two types of laughter that are somewhat closely allied are the "hypocritical" and the "bitter".

The hypocritical laugh expresses a sense of triumph that is not felt in order to mislead the companion or herd into a belief that the laughter is in agreement with them, and the penalty he pays, if discovered, is analogous to that which the carnivorous animal would suffer if he roared in triumph when he had slain no prey. This also explains the suspicious hostility with which some regard a person when they do not know what he is laughing about even when there is no suspicion that he is laughing at them.

The bitter laughter, also forced, expresses a triumph that is not felt, but in this case sufficient knowledge has been acquired to make a real triumph along a given line possible in future. It is, therefore, anticipatory and precautionary, as well as expressing a superiority to his former unequipped state. Of course in modern life much humor is dependent upon compound triumphs in which a point is gained without sacrificing the respect of the joker's fellows, as in the subtle and risque type of humor.

REFERENCES.

1. Ambition, Egotism and the Social Instinct. C. E. Reynolds, Southern California Pract: April, 1917.
2. Instincts of the Herd in Peace and War. Wilfrid Trotter, 2nd Edition Nov., 1919 (Unwin).
3. Emotional Expression in Man and Animals. Charles R. Darwin.
4. Integrative Action of the Nervous System. Charles S. Sherrington, 1906.

THE LAY OBSTETRICIAN.*

BY J. S. TREWHELLA, M.D., MONTEBELLO.

The question is not "Is the lay obstetrician a necessity;" the midwife should be unnecessary. How can we best deal with her, or shall we dispense with the lay obstetrician altogether?

Midwives are prohibited by law in Massachusetts.

Education and control of the midwife tend to defeat her ultimate and entire elimination.

The midwife reports, but her report is accepted offhand; the decision of the midwife's work is left to herself.

In Pennsylvania they have a system compiled at the bedside by medical inspectors. In Philadelphia, the state employs, through the Bureau of Medical Education and Licensure, a supervisor of midwifery, who is a trained specialist in obstetrics. This supervisor has at his disposal, as inspectors, women graduates in medicine with a special experience in this branch of medicine, who have in addition command of various languages of immigrants.

Each midwife has a certificate good only for one year and in that district, she is allowed to attend only normal cases, she must report to her inspector every labor of primipara which is of thirty-six hours' standing and it becomes the duty of the inspector to see the case at once; a multipara cannot be in labor more than twenty-four hours before her case is reported.

If the mother has fever or the child has sore eyes, the inspector must be immediately summoned, in other words, it is not left to the discretion of the midwife as to what or what not is normal. The state officer after the above

*Read before the Los Angeles Obstetrical Society.

limit of time decides this point. The midwife performs no operation of any kind, except tying the cord. She is called by her inspector to demonstrate her work often. Within forty-eight hours of each delivery her report must be in the hands of her inspector. The supervisor in turn makes a quarterly report to the Bureau of Medical Education and Licensure. Every case is seen by the inspector and checked up by the supervisor and in turn by the bureau itself.

Dr. Dee Lee of the Northwestern University says, "I desire to state that I am fundamentally opposed to any movement designed to perpetuate the midwife".

In educating the midwife we assume the responsibility for her, we lower standards and compromise with wrong. The midwife is a relic of barbarism and her perpetuation demands a compromise between right and wrong. She is an obstacle in the progress of the science and art of obstetrics, and her existence is stunting the one and degrading the other.

In 1914 there died during childbirth, in the United States 10,518 women. On this basis we just admit there are 15,000 deaths from childbirth each year. If we would include operations performed to correct the bad effects of childbirth, nephritis, endocardial diseases, puerperal infections and women buried under another diagnosis, no exception will be taken when we say 20,000 women die annually of childbirth from immediate and remote effects.

The lay public will continue to regard with indifference all pleas for improvement in the teaching and practice of obstetrics so long as more than fifty per cent of confinements are in the hands of ignorant non-medical persons, who as a class are regarded as capable of doing the work satisfactorily.

Why should there be double standards in obstetrics? Is there one standard for midwives and one for doctors? Can we have two standards for surgery? Do we recognize the spectacle fitter? Why not train the chiropractor and the Christian Scientist?

The medical schools are raising their standards. Preliminary education, fifth hospital year is demanded, yet we try to educate in a few months, an ignorant woman, up to the standards and responsibilities of mortalities that stagger the best of surgeons.

Is not this a jump backward? Should we subscribe to this anomaly, this anachronism in medicine?

With our present standards, young men will not take up obstetrics, and as long as the medical profession tolerate the midwife, the public will not be brought to realize that there is a high art in obstetrics, and that it must pay as well for it as for surgery. This is only common justice to labor, self-sacrifice and skill.

J. M. Baldy of Philadelphia says, "The midwife should not exist. The time has come when it is possible to eliminate her".

As I said before, midwives are prohibited in Massachusetts. There are thirty-seven counties in Illinois that have no midwives. Brackin of Minnesota, State Board of Health says, "Midwives are no longer necessary". Matson of Ohio says, "Midwives are employed by foreigners only, they can be abolished".

Dr. Lee wrote to fifty-one physicians and forty-four held them entirely dispensable, five only saying they considered them necessary.

California is known as a progressive state. Some branches of our state government are progressive and up to date; but this phase of the administration is sadly deficient. Let us encourage our young men to make special preparation in obstetrics, instead of giving an ignorant woman a two months' training

and then sanctioning her work. Therefore in conclusion, let me repeat "In educating the midwife, we assume the responsibility for her, we lower standards and compromise with wrong. The midwife is a relic of barbarism and her perpetuation demands a compromise between right and wrong. She is an obstacle in the progress of the science and art of obstetrics and her existence is stunting the one and degrading the other".

ECLAMPSIA—ITS TREATMENT AND PROPHYLAXIS.*

BY D. A. THIEME, M.D., LOS ANGELES.

There is probably no more dangerous condition that the obstetrician has to face, or to bear in mind continually than that Symptom Complex, called ECLAMPSIA. Its symptoms, its pathology, are so varied that to classify a condition like this seems almost impossible, as yet the cause seems to be unknown.

We may say that it is a Toxemia, yet what form of Toxemia? The liver may be, and nearly always is involved, the kidneys—the brain, etc. So we can practically say that it is a Toxemia, occurring during pregnancy, less often during labor, and least of all in the puerperium, having a more or less definite train of symptoms, and the end results may be as doubtful as its cause and pathology. Therefore, (if time allowed) it would be very interesting to take up the pathology and history of this condition. I will only review briefly the symptoms, and treatment. and particularly the preventative treatment of the complication which occurs during pregnancy. Frequency—Some say 1 in 500, others say 1 in 300 cases, this complication is stated to appear in 1 per cent of all cases of albuminuria of pregnancy. (Edgar).

DeLee says—Eclampsia occurs about 1 to 600 cases—pumps more often effected 3 to 1—Symptoms generally occur during last month of pregnancy. From the following table in the different lying-in hospitals taken from Goldberg in Dresden, Newell in Boston, Reinberg in Paris, Lichenstein in Leipzig, and Williams in Baltimore, it shows that about 1.0% of these patients develop or have eclampsia. These figures may be high when we take in consideration, that many of these patients would not enter the hospital if it were not for this pathological condition.

SYMPTOMS—The symptoms may be divided under two heads namely—I those occurring before the convulsions, or pre-eclamptic, and those during the attack itself. Pre-eclamptic history of patient (that should put us on our guard). Hyperemesis during early month of pregnancy, or the continuation of vomiting at intervals during the pregnancy are extremely important. (Edgar). The previous history of the patient, as to her condition before her pregnancy is important, and not less so the family history, as to alcoholism, insanity, eclampsia, etc. These indicating a hereditary instability of nervous make up, also has the patient had any disease that could, before her pregnancy, have damaged her kidneys—such as scarlet fever, Bright's (acute) or has she had eclampsia before this present pregnancy. This last question, as to a former attack, or threatening attack of eclampsia is extremely important, as I shall show later in case history.

Edema—We know that many pregnant patients have some Edema of their feet, which is only too often thought to be due to pressure or some other mechanical cause. This is, however, not nearly so often the cause, as

*Read before the Los Angeles Obstetrical Society.

we would like it to be. Look out for this, even if the urine shows no albumen, (nepbrites may exist without showing albumen), and hence this Edema may be, and probably is due to a toxemia, hence look out for eclampsia, when this Edema is constantly present, and combined with a high blood pressure it becomes a formidable case. This brings us to one of the most important subjects—BLOOD PRESSURE—there probably is no better index, or a better danger signal than the Bl. Pr. norma l blood pressure —110-120 syptolic 75 to 85 drastolic. A blood pressure above 150, in a pregnant woman means danger, and yet I see many men who never take blood pressure during pregnancy. Your blood pressure will give you warning of impending danger very much earlier than your urine examinations, which I will show in a history to follow. The general urine examination that is made is only too often made carelessly. THE URINE—Albumen with casts and blood are the most important finding diminished output, with decrease of total solids is next in importance. The percentage of Urea is not a reliable index, but it does help in the diagnosis. If the Urea gets less, while the albumen increases, the danger signs are there.

With these—High blood pressure, continual vomiting, edema, the urine, the patient also complaining when questioned about pain—she will tell you she has pain in her legs, she has pain in her head, and she has pain in the epigastrium, also she will tell you she has "spots" before her eyes—sometimes dimness of vision, pholphobia, etc. So then we have all these symptoms—

High blood pressure, continual vomiting, edema, the urine, the pain in the legs and epigastrium, and like symptoms. These symptoms are all brought out by careful examination, and history taken. Hence we make the following rule, and instruct our patients. We have patient come to office every 2 weeks—at the first visit a careful history is taken as to her former health, etc. Bl. Pres. taken, also careful examination of urine, at end of two weeks Bl. Pres., urine exam. 24 hs. specimen again taken and this done throughout her pregnancy. All blood pressures and urine findings are carefully indexed every time she comes to office, and put on her history chart. This only takes a comparatively small amount of time, maybe 20 or 30 minutes, and the results are worth it.

If all men doing obstetrics would follow out this plan of history taking and examinations, as I have briefly spoken of, surely many of the cases of eclampsia could in a way be prevented, therefore, I say, taking careful history of the patient is the first step in the pervention of Eclampsia.

Now then if we have a patient with threatening Eclampsia, what are we to do? Also if we have a patient with Eclampsia, what are we to use? Threatening Eclampsia—Put patient to bed, absolute rest, milk diet, catharsis, careful watching. We have found that the milk diet did reduce the blood pressure, etc., lessen albumen for the time being, but also that as soon as the regime was changed all the former symptoms reoccurred, so that very frequently, after trying this we had to come to more radical measures. You all know the symptoms of an Eclamptic attack—if you have seen it once you will never forget it. All of us here have probably seen it, so it is of no use for me to try to describe the symptoms.

THE PATIENT with Eclampsia, having convulsions, some say—Wait, give chloral, protect your patient sweats, morphine, etc. This may seem good treatment to some—however, and (this is simply personal) I think it is poor treatment. If we consider the pathology, the cause, the symptoms of Eclampsia, carefully, and when we realize what causes this condition (a

Toxemia) a poison that this individual is unable to eliminate, we can readily see that we must remove the cause, or at least lessen the cause of this Toxemia.

"Experience is accumulating to prove that the rapid emptying of the uterus, under deep narcosis gives the best results". (DeLee).

I fully realize that some of you will disagree on this and also what best procedure to pursue, and that is the reason I wrote this—personally I empty the uterus, rapidly, carefully, depend of course as to the extent of pregnancy, the condition of mother, the condition of the child. Don't be in too great a hurry—look out for your technic. Save the mother, and by all means try to save her baby.

This paper has nothing original about it, the authors that I am indebted to are: De Lee, Williams, Petterson and Edger Jewett.

A few personal cases, showing the value of the taking of blood pressure—some of these cases (2) I saw in consultation—

Mrs. T., age 21—had 2 babies—was called to see her when 8 months pregnant—made diagnosis of twins—at the time Bl. Pres. 130-80 headache—urine neg.—two days afterward severe headache—urine neg.—Bl. Press. 180—urine neg.—next day 230—urine neg.—refused to go to hospital, next day Bl. Pres. 245, convulsions, taken to hospital. Twins at hospital, all O.K. Albumen cather. spec. neg. until 2 days later albumen present.

Mrs. S., one baby, she told me had convulsions, with last baby, now 4 months pregnant—Bl. Pres. 180—albumen present, put to bed—milk diet, etc. Bl. Pres. came down to 140—as soon as she got up blood pressure raised to 189. Aborted patient on account of that.

Mrs. R. had 2 children, been normal, not under anyone's care until called—all symptoms of threatening Eclampsia. Bl. Pres. 170, nothing in urine. Diet for 14 days, which reduced Bl. Pres, got up. All symptoms of Eclampsia, Bl. Pres. 193—empty uterus.

Mrs. H., pregnant 7 months, had no doctor before was called on account of headache and dizziness—urine neg.—Bl. Pres. 200. Just when I left house convulsions—taken to hospital, baby and mother O.K.

Mrs. K., was called to see her in consultation one hour after baby was born, Eclampsia, many convulsions—death—baby O.K., 3 years old now.

Mrs. L., was called to see lady in labor, had no doctor before—when called had three convulsions, breech presentation, I delivered, at house rapidly, dead baby, mother had no more convulsions, but developed peraural insanity lasting 3 weeks then O.K.

In these few cases, or neglected causes if we can call them such, all showed high blood pressures. Had the blood pressure been taken regularly maybe the outcome would have been better, it also shows in every case that the blood pressure gave us warning long before the urine showed anything.

These cases were only taken from many to show the importance of taking blood pressure.

The Medical Record's London correspondent says: Recently a magnificent loan has been made by the British Government to the Middlesex Hospital laboratories. This loan consists of five grams of radium bromide and a feature of this acquisition is that although the quantity is less than one-fifth of an ounce, it is the largest that has ever been available for use in bulk in the work of research. It may be said that its value is in the neighborhood of £100,000, and the loan is made subject to termination at ten days' notice in case the Government should need it. The radium at the time of the armistice was in the hands of the Ministry of Munitions.

SOUTHERN CALIFORNIA PRACTITIONER.

A MEDICAL, CLIMATOLOGICAL AND SOCIOLOGICAL MONTHLY MAGAZINE.
This journal endeavors to mirror the progress of the profession of California and Arizona.

Established in 1886 by Walter Lindley, M.D., LL.D.
DR. GEORGE E. MALSBARY, Editor and Publisher.

Associate Editors,
Dr. Walter Lindley, Dr. W. W. Watkins, Dr. Ross Moore, Dr. George L. Cole, Dr. Cecil E. Reynolds, Dr. William A. Edwards, Dr. Andrew W. Morton, Dr. H. D'Arcy Power, Dr. B. J. O'Neill, Dr. C. G. Stivers, Dr. Olga McNeile, Dr. W. H. Dudley, Dr. J. M. Mathews.

Address all communications and manuscripts to
EDITOR SOUTHERN CALIFORNIA PRACTITIONER,
Suubscription Price, per annum, $1.00. 1414 South Hope Street, Los Angeles, Cal.

EDITORIAL

STATE BOARD OF HEALTH.

The Los Angeles Daily Times, February 29th, said:

SACRAMENTO, Feb. 28.—Dr. Irving R. Bancroft of Los Angeles, was appointed today by Gov. Stephens to be a member of the State Board of Health, succeeding Dr. W. H. Kellogg, whose term has expired.

Dr. Kellogg held, in addition, the office of secretary of the State Board of Health and it was indicated this office also will be relinquished by him.

Dr. Walter Lindley of Los Angeles, was named by the Governor to succeed Lemoyne Wills, term expired as a member of the Board of Health.

Dr. Bancroft has been connected with the State and Los Angeles city health departments since about 1906. When he first came here from his home in Massachusetts, he was almost immediately made a member of the State Board of Health.

Subsequently he became an assistant director of health for the city under Dr. Powers, serving in this capacity until he was made director of the health department of the Los Angeles school board. At the outbreak of the war, Dr. Bancroft joined the army medical forces and served for two years with rank of a captain. Since being discharged from the service he has been practicing surgery in this city. He is one of the visiting surgeons at the County Hospital.

Dr. Bancroft stated last night that he had not been officially notified of his appointment, but admitted that he had been approached several weeks ago by friends and asked if he would accept the office. He said the new position will take him to the capital.

Dr. Lindley is a native of Monrovia, Ind. He is a graduate of the Minneapolis High School, Keen's School of Anatomy. Philadelphia and Long Island College Hospital. He was one of the founders of the Los Angeles Orphans' Home; the Los Angeles Humane Society, the college of medicine of the University of Southern California and the Whittier State School. His greatest work is the California Hospital. He founded this institution and is its sec-

retary and medical director. Dr. Lindley has been prominent in all activities looking toward this city's advancement. He has been health officer of the city; member of the Board of Education; superintendent of the County Hospital. He is a director of the Farmers' and Merchants' National Bank, and a member of the board of directors of the Los Angeles Public Library. He has written several books, chief among which are "California of the South", "Shakespeare's Traducers, An Historical Sketch", and numerous papers and pamphlets on medical, social and climatological subjects. He is a member of the California, University and Los Angeles Country clubs.

EDITORIAL NOTES

Dr. G. A. Broughton is health officer in the city of Oxnard and has chosen Dr. Chas. Teubner as his deputy, whose particular duty will be to keep an eye on the Mexican population of that city.

Dr. Wm. H. Mayne, who has been long and favorably known in general practice in Los Angeles, has taken offices in the Brockman Bldg. and will hereafter limit his attention to G. U. diseases.

Dr. Caeser G. Cahen of Los Angeles has returned from France, where he served during the war as major in the French Army. He has resumed practice and his residence is with his parents at 1220 Westlake Ave.

Dr. (Capt.) Byron Stookey is still doing research work at the Columbia University, New York, under the direction of the Federal Bureau Research. Dr. Stookey's work is entirely along the line of Neuro-Surgery.

At a recent meeting of the Santa Barbara Medical Association, Dr. F. M. Pottenger of Monrovia read a paper on the "Diagnosis of Tuberculosis". The following were elected officers of the association for the ensuing year: President, Dr. C. S. Stevens; vice-president, Dr. Bagley; secretary-treasurer, Dr. Henderson; vice-president at large, Dr. Brown of Santa Maria.

"One unexpected bit of information that has come from the work of compiling the 'Census of Fifteenth Century Books Owned in America' is the keenest and most intelligent collectors of these books in this country are physicians. Not only is the proportion of medical books listed in the 'Census' high, but the owners of them have been, as a group, by far the best informed regarding their possessions and the most eager to render assistance."

We did not have the privilege of listening to Dr. Charles A. L. Reed of Cincinnati, when he spoke before the Los Angeles County Medical Association, but if his address was reported correctly by the newspapers, we feel that our loss should be sustained with courage, for a man with intelligence enough to become president of the American Medical Association, to devote his time and the time of many listeners to consider the organization of a medical trades union, is certainly oiling the toboggan for the whole profession.

A French Treatment of Influenza.— A dispatch to the Sun from Paris gives details of a remedy for influenza advised by Dr. de Gerin of that city .It consists of the injection into the gluteal muscles once a day for five or six days of a solution of guaiacol, 0.1, eucalyptol, 0.5, and camphor, 0.5, in 3 c.c. of sterilized olive oil. If pulmonary complications appear, he gives a tablespoonful every two hours day and night of a mixture of tincture of opium and tincture of belladonna, of each 35 drops, and ammonium chloride, 4 grams, in 250 c.c. of distilled water, flavored

SOUTHERN CALIFORNIA PRACTITIONER.

VOL. XXV. LOS ANGELES, APRIL, 1920 No. 4

THE ADVANTAGES OF INTERNAL VERSION OVER FORCEPS WITH SPECIAL REFERENCE TO DR. POTTER'S METHOD OF VERSION*

BY H. WALLACE MURRAY, M.D., PASADENA.

Version or turning the polarity of the child with relation to the mother has been practiced as early as the time of Hippocrates.

Celsus about the time of Christ and Aetus, some five hundred years later successfully did Podalic Version. Ambrose Paré in 1550 and Weigand in 1870 did successful version, but it was used in Japan and Mexico prior to this time but in a very crude and cruel manner. Wright, in 1856 and Braxton Hicks in 1860 described and perfected the combined method.

The use of forceps also dates back to the time of Hippocrates and has come to us through a long series of modifications until today most authorities admit the Simpson forceps with slight modifications to be the best.

De Lee in his definition of forceps says, "The forceps of obstetrics is an instrument designed to extract the foetus by the head from the maternal passages without injury to it or to the mother. As soon as the right of either is encroached upon the instrument ceases to be the forceps of obstetrics, but becomes simply the instrument of extraction similar to the craniotomy forceps and not so good."

My object in writing this paper is to bring to your attention the advantages of one method of extraction and to try and prove to you that a great many times either or both the mother or child are mutilated by forceps to such an extent as to make their use not justifiable when we have better and safer means of accomplishing the same results.

In this paper no criticism is attached to the application of low forceps when we terminate an unsuccessful labor on account of a tired and "worn out" mother.

De Lee gives the following indications for forceps:

(1) Pelvis large enough to permit delivery of an unmutilated child.

(2) Cervix must be effaced and dilated or such enlargement easily procurable.

(3) Membranes ruptured and out of way because of dislocation of placenta.

(4) Head engaged or so nearly so

*Read before the Los Angeles Obstetrical Society, March 9, 1920.

that a cautious trial of the forceps may be permissible.

(5) Child must be living, otherwise craniotomy.

There is not one of these indications which may not be given for version with the possible exception of engaged head though this does not contra-indicate version if quick delivery is necessary.

On the other hand version is indicated in—

(1) Any abnormal attitude of the child, as—face and brow, anterior and posterior parietal bone presentation.

(2) Prolapsed cord.

(3) Placenta previa.

(4) Any complication which requires rapid termination of labor.

(5) Mild contracted pelvis.

According to De Lee this last is the most discussed one and as he says,—"The question is does the head pass through a slightly contracted pelvis easier when coming last than when going first. Experience and experiment on the cadaver prove that it does, but it has to come quicker and as a result many babies die."

If then I can prove that by Version we can produce more living babies with less mutilation of the mother it seems I have at least partially proven my case.

Version lessens shock by shortening labor; it also conserves the patient's strength and does away with injuries to the baby's head. We cannot disregard the fact that prolonged application of forceps is followed by injurious results to the child such as epilepsy, idiocy, birth palsies, etc., which may be attributed to difficult forceps deliveries.

Dr. Gordon Dickinson of Jersey City says, "I have observed in many families that the first born was not 100 per cent efficient and when there were a number of children in the same family the later children were the brightest, cleverest and most genial. I have been told or have read that compression of the brain leads to petechial hemorrhages in the cerebral tissue." If this be true, might this not be an argument in favor of version?

It has remained for one of our generation, Dr. Irving W. Potter of Buffalo, to perfect and bring to the attention of the medical profession the advantages of version and to show with what ease and degree of safety it can be practiced.

Whether we agree with Dr. Potter as to the indications for version, (for as most of you know, Dr. Potter does a version on nearly half of his cases), we will have to admit his results little less than marvelous.

Two years ago Dr. Potter had done over 1200 versions with no maternal mortality and a maternal morbidity and fetal mortality far better than could be obtained by any other method.

For a description of Dr. Potter's method of version I can do no better than quote Dr. Zinke's description of it published in the December, 1918, number of American Journal of Obstetrics, in which he says:

"While the patient is being chloroformed to the extent of total unconsciousness, Dr. Potter thoroughly scrubs his hands and forearms with soap and water, after which he puts on a long-sleeved, sterilized gown and skull cap. He then places upon the left hand and forearm a long-sleeved rubber glove extending up to and slightly beyond the elbow; upon his right hand he wears an ordinary short rubber glove. He invariably uses his left hand to perform version, no matter what the attitude of the child in utero may be. The patient, in the recumbent position, is brought to the edge of the confinement table so that the buttocks extend slightly over the edge. Each leg is supported by a nurse. The thighs are not flexed upon the abdomen, as in the lithotomy position, but simply separated and held apart while the legs hang, loosely flexed in the knees, over the

supporting arm or hand of the nurse on each side. The pubic, vulvar, and perineal regions have been previously shaved and rendered aseptic. The bladder is catheterized by the operator himself, and entirely emptied if possible. After lubricating the rubber glove on his left hand and forearm with liquid soap, he proceeds first by dilating the vulva and perineum with the fingers of that hand, introducing one after the other, and effecting gradual dilatation of the parts by alternately spreading the fingers gently apart. In the short space of a minute or two, his hand is within the vagina. His first effort consists in carrying the uterus and child above the brim. This done, he begins to detach the membranes from and around the dilated os. If dilation of the os is not complete, he introduces his whole hand into the lower segment of the uterus, then extends his fingers in every direction and withdraws the hand slowly from the uterus. This maneuver is repeated until he has obtained full dilatation. His hands and fingers act on the principle of a Bossi dilator; the difference is that the hand is a better and safer dilating instrument. During the withdrawal of the open hand and separated fingers, he gently takes hold of the membranes and carefully pulls down the bag of waters, always taking care not to break it. To my surprise this maneuver was not attended by loss of blood in either of the two cases I witnessed.

As soon as full dilatation of the os has been secured, and complete detachment of the membranes within the lower uterine segment is effected the membranes are ruptured and the left hand goes at once in search of both feet, while the right hand supports the uterus from above. When the feet have been found, been firmly seized between the thumb, index and middle fingers, traction is made upon them, while the free hand upon the abdomen, immediately above the symphysis pubis, pushes the fetal head toward the fundus of the uterus. All of this is done in a quiet, gentle manner. The forearm of the operator closes the vulvar orifice and most effectually prevents the rapid escape of the liquor amnii until the lower extremities plug the os. In this way nearly all of the amniotic fluid remains within the birth canal. The feet, once at the vulva, are held there. The body of the child is expelled entirely by the contractions of the uterus. During the expulsion of the child's body, the operator merely assists in the rotation which nature directs, and the shoulders are made to descend, dorsum anterior, in either the right or left oblique diameter of the pelvis. No traction is made upon the child while the body is being delivered. A piece of gauze is placed between the legs of the child to catch any meconium that escapes from the anus. When the shoulders of the child have arrived within the pelvic cavity, the operator rests the body of the child upon his left hand and forearm, and covers it with a warm cloth. With the index and middle fingers of the right hand the arms of the child are brought down as soon as the scapula shows under the pubic arch, first the anterior one, and then the posterior. When this is accomplished, he directs the legs of the mother to be lowered until they are almost in a Walcher position; and then with his right hand the flexed head is pressed into the pelvis from above, while the index finger of his left hand, placed in the child's mouth makes gentle traction upon the head from below. Flexion of the head is thus not only favored, but increased, and with little effort the lower half of the face is brought to the vaginal outlet. The body of the child is now extended toward the mother's abdomen, thus exposing the child's throat, which is gently stroked with the index finger

from the chest toward the mouth, for the purpose of emptying the trachea and esophagus of blood and amniotic fluid the child may have swallowed or sucked in during efforts of premature respiration. If the head admits of easy evolution, it is delivered at once; if not, Dr. Potter is in no hurry, because the child can breathe freely with the mouth exposed at the vulva, and the mother is in no danger whatever. Should there be undue delay at this state of birth, the forceps can be applied without difficulty and the head extracted without injury to it or to the mother."

After witnessing Dr. Potter's work and examining a case before he did a version one cannot help but be impressed with the ease of its performance and of its wider field of usefulness.

By a great many obstetricians version has not been used or even considered in simple difficult labors for the reason that version was considered contra-indicated in primipara and eight out of ten difficult labors were primipara.

Dr. Potter has demonstrated that primaparity is no bar to version for nearly half of his cases are of this type. The grandmothers of the past were content to sit by the fire and knit. In fact, it was about all they could do on account of the wrecked condition of their pelvic organs as a result of their treatment at the child-bearing period. The grandmothers of the present generation are not content to be relegated to a place by the fire, but want to drive their automobiles or ride in an aeroplane. Do you suppose anything has had more to do with bringing about such a condition than the high forceps application?

With pelvimeter measurements making the detection of contracted pelvis moderately certain, with vaginal Caesarian and extra-peritoneal abdominal Caesarian section so safe a procedure when the classical Caesarian section is not indicated, it seems to me that the axis-traction forceps can and should be placed on the museum shelf as a relic of the past ages.

With all due respect to those who prefer to grasp the anterior foot in their versions and feel satisfied with this method, for myself I see nothing to justify such a course. I think it just as essential to grasp both feet as it is to use two blades of the forceps.

According to De Lee—"In two hundred and eight cases in which forceps were used version had been tried on only one, while in forty-four cases in which version was done forceps had been tried in six cases, or fourteen per cent, thus showing that version was successfully done where forceps had failed."

As a summary of my conclusions and a possible repetition, I wish to give the salient points as given by Dr. Potter for the successful performance of version.

The cervix should be completely dilated or easily dilatable before version is attempted.

Deep anaesthesia is best at all times. Ninety per cent of his cases have been chloroformed to a surgical degree without an accident or apparent danger to mother or child.

Operator should wear elbow length gloves.

Bladder should be empty.

Every antiseptic and aseptic precaution should be taken to render the vagina sterile before version is attempted.

Primaparity is no bar to version.

Both feet should be brought down together.

No attempt should be made to deliver the arms until the scapulae are outside the vulva and then the anterior arm first.

The operator must remember that in

delivering the head extreme flexion is necessary and can be produced by gentle traction in the child's mouth and pressure above the pubes. The after coming head may be delivered with forceps if necessary. After the delivery of the chin and mouth mucous will flow from the child's mouth. This should be removed because many children breathe before the complete delivery of the head.

The operator should have a perfect knowledge of the attitude of the child in the uterus and the ear is a better guide in gaining this knowledge than the sutures or fontanelles.

Version can be accomplished only by introducing the head into the fundus and by exploring the uterus and fetal parts carefully.

Version is a procedure which should never be hurried; the operator should always be master of the occasion.

The Walcher position gives the best results.

If the membranes have not ruptured it is well to separate them from the uterine wall as high up as possible before rupture is undertaken.

Maternal mortality in properly selected cases should be nil and maternal morbidity is no greater than in normal cases. The mutilation of the soft parts is less than that resulting from forceps. The principal dangers to the child are due first to prolapsed cord, partial, complete or concealed; the last being more common than is generally supposed; and secondly to prolonged pressure of the uterus upon the child in neglected faulty presentation cases and in border line cases of contracted pelvis.

The intelligent application of forceps to the after coming head has greatly reduced the fetal mortality and morbidity.

According to American Medicine of July, 1917, a bulletin recently issued by the Children's Bureau of the Department of Labor, more women between the ages of 15 and 45 years die of puerperal diseases than any other disease except tuberculosis. About 15,000 maternal deaths, the results of pregnancy and labor, occur annually in the United States and these figures show no decrease since 1900. Are we doing all we should to lessen the number of these deaths?

Let us do all we can to mitigate the terrors of the confinement.

Let us study to perfect our technique in version and see if it has not a wider field of usefulness than it has had in the past. 314 Chamber of Commerce Bldg.

THE "PERIOD OF GESTATION"*

BY W. S. PHILP, M.D., LOS ANGELES.

In choosing the subject of this paper I did not expect to offer anything new; that I cannot do. There are, however, many points for thought and judicious care during the "Period of Gestation," hence I considered we might spend a few profitable moments in reviewing some of these, and perhaps be lead to a helpful discussion thereupon. In Dr. Malsbary's able paper "marriage," read before this society year before last, the benefit to the human race of a careful preparation for this important event, and caution that contracting parties present themselves "void of offense," was duly presented. By such preparation, it seems to me, lies the first important element in establishing a basis healthy happy offspring. Given parental bodies free from distinct constitutional or mental dyscrasias, and with no local foci of disease, all we further need for this happy issue, is due care along the nine months' journey

*Read before the Los Angeles Obstetrical Society, March 9, 1920.

from conception to the matured foetus. This brings us to a hasty review of the "Period of Gestation." First, I should have us as counselors of prospective mothers, to instill into their minds the sacred nature and office of motherhood. To have them possessed with the realization of its great mission and privilege. When a young woman understands her responsibility she more willingly co-operates with her physician in following instructions best suited to further her and her child's interests. Every woman should be instructed to report to her physician as soon as conception is discovered. This early consultation is really very needful, for "nausea," so often distressing and injurious, may be largely forestalled. It is generally regarded, though not proven, that nausea is of toxic origin. If so, early flushing of the emunctories and regulation of the diet and work, is wisdom. Even if nausea is purely reflex or otherwise this procedure is not out of line. Frequently the low nutrition during the early weeks of pregnancy leads to an anaemia difficult to fully relieve later on.

I believe anaemic states and the lowered resistance in cell life so caused, conduce to disturbed metabolism, and lead to albuminuria and toxic irritation, etc. We have impressed our cases to report early, how shall we best prepare and advise them at this stage. We should take a full case history. We should inquire into environment, and impress on relatives the need of cheerful conduct and avoidance of untoward actions or conversation. Husbands are frequently most grouchy when their wives are in this nervous and often fretful state. Anxiety and care should be lifted. Her duties should not cause strain or apprehension. Her exercise should not be that of a house drudge, but exercise enjoyed in pleasant walks or rides in the company of those loved and cheerful. Housework is good but not if it proves a burden. She should not be left alone all day to meditate and sometimes suffer distress. Left alone she may prepare no dietary, else a very inefficient one. She should be housed and clothed as carefully as possible. Even in poor homes proper heat and ventilation can usually be secured. A small sheet iron stove excels gas and oil heaters many times. Give instructions on ventilation, especially of sleeping rooms. Give instructions on underwear, high heeled shoes, proper hosiery, corsets and tight bands. Give instructions on bathing. Stop the morning "plunge," and advise the "sponge," and stop this if reaction seems enfeebled. Advise careful regulation of the bowels and the drinking freely of pure water. Advise plenty of nutritious food of a quality non-taxing the digestion. The uterus should be examined and if the cervix is eroded touched with a preparation of Iodide and Iodide of Potash in glycerine, and a mild Ichthyol, Boroglycerid tampon inserted in the vagina. If there is displacement of the uterus or prolapse, the early adjustment of a light and carefully moulded pessary, will prove of benefit and do much to prevent miscarriage in such conditions.

At that time each month when the menses would appear, were the woman not pregnant, marital relations should be suspended; often better suspended throughout methinks. Where there is congestive discharge I can see no harm in the use of a mild saline or alkaline warm douche, followed by two hours of rest in the reclining position. If nausea and vomiting are too severe despite our hygienic advice, etc., it is best handled, it seems to me, as we determine whether the central nervous system is chiefly disturbed, or the sympathetic paths in the abdomen the more irritable. Sodium Bromide ten to fifteen grains with fluid ext. of Adonis Vernalis, one or one and one-half

minims—to prevent the depression of the bromide—in peppermint water, or essence of pepsin appears to give real aid to the first. While cocaine muriate gr. one twenty-fourth, hydrocyanic acid dilute, minims one and one-fourth and bismuth subnitrate ten grs. in mucilage acacia q.s. and peppermint water, taken before food, has worked well for me in these latter cases. The dose of cocaine is so small it has never proved a menace. The bowels must be made to move in such conditions. If mild aperients fail a good clearance with our "hospital cocktail" of oil, lemon and soda is good, followed by the "cascara cathartic" pill. This pill has never proved injurious, but most helpful in my stubborn cases. Be careful of enemas, given in small quantities and non-irritating they will prove of service. Diet during severe nausea is frequently a hard proposition. Clam juice, tomato juice (expressed from the fresh ripe tomato; usually stay; then milk and barley water, etc. A grain food such as imperial granum in certified cows milk gives nutriment and is not sweet, hence usually acceptable. Some cases of nausea, however, give us great trouble. Early in our history as a society this matter was fully discussed. One of our members found penciling the external "os uteri" with silver nitrate very helpful. The stage of nausea over, we come to the period when a woman seems to "vegetate," to feel better than ever in her life, we often hear.

She demands food and plenty of it, and often rapidly increases in weight. We watch this time with pleasure but anxiety, for just here the organism feeling the exhilaration of this wonderful stimulus is often overdone. I insist now on care in diet and exercise. Women out in the fields, as in Europe, young, hardy and use to toil, and coming from mothers reared similarly, may continue arduous labor and full diet with impunity, it may be. Many of our women however, living the modern American life, need be most carefully advised in these matters. It is our duty to insist on these things especially the diet. The consumption in this city of sweets and rich mixtures at sweet shops and soda fountains is, I believe, excessive. A case I knew ate as she pleased and had an eleven and one-half pound baby with severe albuminuria, instrumental delivery and loss of the child. Pelvimetry showed she had a pelvic capacity for a ten-pound infant. In her second gestation she was rigidly dieted and had a seven and one-half-pound child and natural labor of two hours and ten minutes' duration. This matter of diet is a much mooted question. I have adopted what is commonly called an "obesity" diet list, allowing only sufficient carbohydrates and hydrocarbons to supply the proper calories, as far as I can judge. This allows certain green vegetables, lean meats, sparingly, clear soups and fresh fish boiled, eggs and ripe fruits, chiefly of the acid variety, with strict regulation of the fats, starches and sugars. I certainly have had vastly better success since following this plan of diet than in the withholding of proteins and allowing starches, fats and sweets the more freely. This is in line with the Russian authority Prochownick. We all know the great importance of watching the urine. The nitrogen output becomes the chief object of our attention and especially the ammonia coefficient. One to three per cent of the total nitrogen is ammonia in health, and should this rise to ten per cent the line of danger is most imminent. There are many minor items of care that nevertheless add considerably to the comfort and general well being of the case.

Some of these are oil rubs, sitz baths, care of perineum and breasts. Guiding the expectant mother in her selection of necessities for her child

and for herself, especially when labor is to be at home, is needful. I have a printed list practical and reasonably economical. Sometimes in the primipara pains caused by "settling" are frequently construed as the beginning of labor and we are called only to find a false alarm. Where these persist I find the specific tincture of Blue Cohosh valuable. It stops these pains and if they be the early pains of labor increases them, thus relieving the situation. Let me tell you of an amusing therapeutic suggestion I received from an old practitioner who had had some forty-five years of hard country practice. This was in my first year of practice and as the good old man had little of the then scientific knowledge I was loath to credit it. He said, young man, if you discover a breach presentation early and give tincture of Pulsatilla in small doses you will have a head. Strange as this advise may seem the coincidence has been remarkable. Try it! Have your patient report at your office at least monthly till the seventh month. Then see her at her home, if preferred, but see her, twice a month thereafter. It is wise at the seventh month to take pelvic measurements. Should our data lead us to believe we will have disproportion between head and pelvis at full term I believe in rigidly withholding at this period, the carbohydrates, and hydrocarbons, in fact following the "obesity" diet to the extreme.

I would like to hear this point discussed, as I have heard it said, the foetus living from the mother's blood will increase in due proportion anyway, I don't believe it. It's best to take regular readings of the blood pressure. Should a patient show danger signs such as increasing blood pressure—especially short pulse pressure—lack of nitrogen output, ammonia about ten per cent, albumnatia headaches, oedema, nausea, etc. What is the best procedure? In the discussion of Dr. Sundin's paper on "Eclampsia" it was held, that prevention is better than cure.

This certainly is my idea. I would insist on absolute rest, putting the patient to bed, gentle catharsis each morning with salines, and provoking steady mild diaphoresis. Let the diet be liquids, give a glass of water and milk aternate hours. In most instances this line of treatment will be followed by lowered blood pressure, and if near full term successful labor. In earlier cases a slow return to more diet and exercise may be possible, if not this line of care should be continued to the end of Gestation. I thank you.

W. S. PHILP, M.D.,
626-31 Consolidated Realty Bldg.
March 8th.

War on Rats.—On New Year's Day the Rat and Mice Destruction Act came into force. By the provisions of this bill the owners of property are made responsible for the rats on their premises. The British military authorities have taken the matter up and the Director-General of Army Medical Service has instructed all general officers commanding-in-chief of commands and districts at home to co-operate with the local authorities as far as the military situation demands. The authorities at the ports, knowing the dangers of plague and its effect on their trade, have been very active. The health authorities of Liverpool have been especially energetic. As far as measures for killing rats are concerned, experience has shown that virus is of little use. The food which has given the best result is either mashed potatoes or cereals flavored with oil of aniseed. Carbonate of barium and red squills have proved the most effective poisons. The Medical Record of Jan. 17th contains the above in its London letter. A steady drive all over the world is what is needed.

SOUTHERN CALIFORNIA PRACTITIONER.

A MEDICAL, CLIMATOLOGICAL AND SOCIOLOGICAL MONTHLY MAGAZINE.
This journal endeavors to mirror the progress of the profession of California and Arizona.

Established in 1886 by Walter Lindley, M.D., LL.D.
DR. GEORGE E. MALSBARY, Editor and Publisher.

Associate Editors,
Dr. Walter Lindley, Dr. W. W. Watkins, Dr. Ross Moore, Dr. George L. Cole, Dr. Cecil E. Reynolds, Dr. William A. Edwards, Dr. Andrew W. Morton, Dr. H. D'Arcy Power, Dr. B. J. O'Neill, Dr. C. G. Stivers, Dr. Olga McNeile, Dr. W. H. Dudley, Dr. J. M. Mathews.

Address all communications and manuscripts to
EDITOR SOUTHERN CALIFORNIA PRACTITIONER,
Suubscription Price, per annum, $1.00. 1414 South Hope Street, Los Angeles, Cal.

EDITORIAL

PUBLIC HEALTH NURSE.

The Public Health Nurse has become an important factor in the prevention of disease. At a recent meeting of the California State Board of Health the following was adopted:

Resolved, that the qualifications for employment as a Public Health Nurse under the provision of Section 3062 of the Political Code and of Section 4225A of the Political Code, 1919 Statutes, shall be as follows:

1. She shall be a registered nurse in California.

2. She shall present certificate of graduation from a school of Public Health Nursing accredited by the National Organization of Public Health Nursing at the time of her graduation, and she shall pass the examination prescribed by the State Board of Health of California.

Provided, during the year following the passage of this ruliug, any nurse actively engaged in public health work may register under the following conditions:

1. She shall be a registered nurse in California.

2. She must have been employed in Public Health Nursing work for at least the six months prior to the date of her application for registration as a Public Health Nurse in California.

AVOCADO FAT.

Physicians welcome the largely increasing acreage of Avocado ("Alligator Pear") orchards in Southern California. One enthusiast (Dr Spinks) near Los Angeles has 150 acres in bearing. Dr. W. W. Hitchcock, medical director of the Occidental Life Insurance Company, is another Los Angeles man who successfully rides the Avocado hobby. A food so healthful and so delicious—O my!!!—should be produced to such an extent that it will become reasonable in price. We urge the medical profession of Southern California to each one put out two or three Avocado trees in his garden.

A recent number of the Journal of the A. M. A. editorially says:

Among the fruits that enter into the dietary of man the avocado, or alligator pear, takes an almost unique place because of its richness in fat. A few

fruits may furnish a noticebale quota of real nutrients in the form of starch and, particularly, sugars; thus an ordinary sized banana is rated at a food value of 100 calories or more. But for the most part the fruits that enter into the ordinary regimen, however palatable, wholesome and dietetically valuable they may be, can scarcely be rated as significant sources of energy. The part that they play in nutrition must be estimated from other standpoints. Accordingly, an edible fruit that may exhibit as much as 20 per cent of fat[2] in its make-up is worthy of special consideration. It may prove, for example, to become a valued adjuvant to the dietary of the diabetic, from which the carbohydrate content of many common fruits unfortunately excludes them. The possibilities of the avocado have been further promoted by recent investigations in California and Washington, both of which agree in assigning an excellent utilization to avocado fat, even when as much as 124 gm. (about 4½ ounces) a day were consumed. Heretofore the market price of this fruit has prohibited a very widespread use of what now appears to be a nutritious as well as palatable food. The avocado is indigenous to tropical and subtropical regions in the western hemisphere; but it is being cultivated to an increasing extent in Florida and California, and may ultimately become available at more reasonable prices in harmony with the history of some other tropical fruits. Dietotherapy will testify that the enrichment of the dietary with a really palatable source of fat will not be unwelcomed in the management of certain nutritive disorders. Ordinary cream rarely exceeds the avocado in available fat content.

1. Condit, I. J., and Jaffa, M. E.: Bull. 254, California College Agr. Expt. Station, p. 381, 1915.

2. Mattil: Ann. Rep. California Avocado Assn., 93, 1916. Holmes, A. D., and Deuel, H. J., Jr.; J. Biol. Chem. 41:227 (Feb.) 1920.

REDLANDS MEETING.

The Redlands meeting of the Southern California Medical Society was a success in every way beyond the anticipations of its officers and most ardent friends. It was one of the largest meetings in the history of the society, in point of attendance, acquisition of new members, and in the volume of scientific work. The meeting started off with a zest that forboded well, beginning on time with a full house that soon overflowed the log house of the Nichewaug, so that the later sessions were held in the commodious and well appointed auditorium of the high school. Incidentally, Redlands was so full that its limited capacity for the entertainment of transient guests was overtaxed and many of the disciples of Esculapius were forced to seek lodging in San Bernardino or Riverside. That those attending the meeting were so well provided for is a credit to the chairman of the committee of arrangements, Dr. E. W. Burke, who worked like a Trojan in arranging for the meeting and the comfort of those in attendance. The large attendance was ascribed by the secretary to the efficacy of printer's ink. It should rather be attributed to the ability and activity of the secretary, Dr. William Duffield, whose coy modesty did not prevent him from being decidedly on the job. The pretentious program was a tribute to the president, Dr. Walter V. Brem. The essayists were all present, except one, whose place was occupied by Dr. Hotchkiss of New York. The sessions all began on time with a full attendance. Indeed, the Friday evening session had the unique distinction of beginning half an hour before the time announced on the program. This was done to give opportunity for the presentation of some excellent lantern slides by Dr.

John Dunlop, illustrating his paper on internal derangements of the knee joint. The scietific program continued with enthusiasm and a full house until late Saturday night, and when it was completed there was a general feeling that the society had amply justified its viability and right to continued existence by the large volume of scientific work. The officers are determined to make the Los Angeles meeting, next fall, so good that no physician in Southern California can afford to miss it. That will help to make the membership reach the two thousand mark, which should be regarded as the normal for the region covered by the society. So far the society has not been divided into sections, so if you have a paper for the program, you had better send the secretary the title early, for the number of papers is limited in order to give more time for their presentation and discussion.

EDITORIAL NOTES

Dr. Robert E. Merritt has taken offices in the Brockman Building.

Dr. Chester H. Bowers announces his association with Dr. Hill Hastings.

Dr. Anders Peterson has opened offices in the Brockman Building, Los Angeles.

Dr. W. L. Haworth has recently taken offices in the building with Dr. Wendell White and Dr. Fredk. Hershman at 1920 South Figueroa st. Dr. Haworth is the fifteenth doctor with offices on Figueroa street. The tendency of the profession is to get away from the crowded almost inaccessible business blocks.

Dr. Irving R. Bancroft, secretary of the State Board of Health, will attend the conference of State and Provincial Health Authorities of North America to be held in Washington, D. C., May 24th and 25th, and also the conference of State and Territorial health authorities, to be held in Washington, May 26th and 27th.

There were approximately 1000 cases of smallpox in California in 1918; 2000 cases in 1919, and there have already been during the first **three months** of 1920 over 2000 cases. California physicians should urge every family with which they come in contact to vaccinate. Vaccination will eradicate smallpox and each physician should do his duty in advocating its universal use. There were recently 65 cases of smallpox in one orphans home in Santa Barbara.

HARROWER PRIZE.

Cash prizes amounting to $500 are offered to members of the medical profession (and to medical students) by Dr. Henry R. Harrower of The Harrower Laboratory, Glendale, Cal., for a series of essays on the internal secretions. There will be five cash prizes: First, $250; second, $100; third, $75; fourth, $50, and fifth, $25. Any subject directly pertaining to the practical and clinical aspects of the internal secretions may be selected. It is suggested that the essays be directed at one special phase of the subject and not generalized too much. It is especially desired to direct attention and emphasis to three important points bearing on the character of the prize essays: (a) The importance of the endocrine glands in everyday medicine. (b) The closeness of their physiological and clinical relations. (c) The advances of organotherapy in general practice. Applications must be received before July 1, 1920, and the contest will close August 15, 1920. It is hoped that the awards may be completed and the prizes distributed in October, 1920.

The Medical Record editorilly says: It is a well established fact, but one which is perhaps not generally appreciated, that many more thousands of boy than girl babies die, although in most years a few thousand more boys than girls are born. The consequence is that in all countries, with the possible exception of lands to which immigration is large, the preponderance of the female sex is considerable and ever increasing. In Europe, on account of emigration and recently because of the war, the undue disproportion of the sexes constitutes a grave problem. A well known English physician, Dr. R. Murray Leslie, a few weeks ago made this disproportion in Great Britain the text for a homily on the dangers to which the large preponderance of women was subjecting the population, and he dwelt especially on this law, that while more boys are born than girls, a considerably larger number of boys die than of girls. According to the views of some authorities, the main reason is that male infants are more complex animals than female infants, and that man is of another type than woman.

The Sacramento Bee of April third says:

Dr. W. H. Kellogg of San Francisco, who a month ago was removed as a member and Secretary of the State Board of Health by Governor William D. Stephens, at a meeting of the board here today was appointed director of the State Hygienic Laboratory in Berkeley.

This means that Dr. Kellogg will return to his old job, as he was director of the same bureau at the time he became secretary of the health body, about three years ago. The appointment, it was said, after the meeting was unanimous and attended by little discussion.

The action of the board, however, will come as a big surprise in many quarters, due to reports circulated at the time of Dr. Kellogg's forced retirement from the secretary's office to the effect that he had fallen a victim of the Governor's displeasure because of the aggressive and independent way in which he handled health matters.

The secretary's position, now held by Dr. Irving R. Bancroft of Los Angeles, carries a salary of $4500 per year, fixed by the statutes, whereas the director of the laboratory, whose compensation is fixed by the board, has been receiving $3600.

Dr. Frank L. Kelly, who has been directing the bureau, will continue his duties as epidemiologist.

The Los Angeles County Medical Association elected the following new members, April 7th, 1920:

C. B. Caldwell, M.D., 112 Myrtle ave., Monrovia; C. W. Craik, M.D., 15 Sunset ave., Venice; Philip T. Cunnane, M.D., 717 Wright & Callender Bldg.; Gordon M. Grundy, M.D., Laughlin Bldg.; Roy W. Hammack, M.D., County Hospital; W. L. Haworth, M.D., 1920 S. Figueroa st.; Rollar G. Karshner, M.D., 711 I. N. Van Nuys Bldg.; P. M. Kellar, M.D., 311 North Jackson st., Glendale; E. E. Moody, M.D., 623 S. Carondelet st.; John P. Nutall, M.D., 109 Ashland, Venice; Hal. W. Rice, M.D., First Nat'l Bk. Bldg., Ocean Park; Ralph R. Rea, M.D., 806-7 Baker-Detwiler Bldg.; Leland S. Welbourn, M.D., Van Nuys Bldg.; Carl G. Weltman, M.D., 3863 S. Normandie; D. B. Zbinden, M.D., Artesia, Calif.

Transferred from other societies:

A. N. Bobbitt, M.D., Citz. Savings Bank Bldg., Pasadena, transferred from San Diego.; Albert A. Fricke, M.D., 1789 W. 25th st., transferred from Duglas Co., Nebraska; Geo. A. Gardner, M.D., 618 Citz. Savings Bank Bldg., Pasadena, transferred from Chicago. Ward Hannah, M.D., 509 Markwell Bldg., Long Beach, transferred from Hamilton Co., Iowa; Wm. J. Johnson,

M.D., Glendale Sanitarium, transferred from San Diego; Romney M. Richey, M.D., 1227 Waterloo st., transferred from Elgin, Ill.; F. R. Rothroch, M.D., 1241 New York ave., Pasadena, transferred from El Paso, Texas; J. M. Wheelis, M.D., 415 Black Bldg., transferred from Shreveport, La.

BOOK REVIEWS

FOOD FOR THE SICK AND THE WELL, How to Select It and How to Cook It. By Margaret P. Thompson, Registered Nurse. Cloth. 82 pages. Price $1.00. Yonkers-on-Hudson, New York: World Book Company.

This is a book of receipts, the result of many years of experience in arranging, changing and adapting them so as to form a well regulated diet for the sick and for convalescents, as well as for those who are well and wish to remain so.

WHITTIER STATE SCHOOL. Fourteenth Biennial Report, 1916-1918. Whittier, California.

This most creditable volume was produced entirely by the boys of the printing classes of the Whittier State School, their ages ranging from thirteen to seventeen. It is a testimonial to the excellent work done by the institution.

FOOT CARE AND SHOE FITTING. A Manual for Officers of the U. S. Navy and U. S. Marine Corps. By W. L. Mann, Ph.B., A.M., M.D., Lieutenant-Commander (M. C.) U. S. Navy; Post Surgeon, Marine Barracks, Quantico, Va., and S. A. Folsom, M.D., Lieutenant (M. C.) U. S. Navy; Medical Officer in charge of Orthopedic Division, Medical Department, Marine Barracks, Quantico, Va. With 58 illustrations. Philadelphia: P. Blackiston's Son & Co., 1012 Walnut Street, $1.75 net.

The proper care of the feet of the marching command is of great importance, and this little practical volume has undoubtedly done a valuable bit of service. It should find a large sphere of usefulness in civil practice.

PROGRESSIVE MEDICINE. A quarterly digest. Edited by Hobart Amory Hare, M.D., Professor of Therapeutics, Materia Medica and Diagnosis in the Jefferson Medical College, Philadelphia, assisted by Leighton F. Appleman, M.D., Instructor in Therapeutics, Jefferson Medical College, Philadelphia. Vol. xxii, No. 4. Lea and Febiger, Philadelphia and New York, Owners and Publishers. Six Dollars per annum.

The Great War has been productive of much valuable medical information, but Goodman declares that the art and perhaps science of gastro-enterology has been scarcely moved to advance a foot by our military experience. At Camp Sevier, for instance, apart from a large proportion of hookworm and an occasional appendicular condition and a rare duodenal ulcer, the gastric cases resolved themselves into constipation, diarrhoea and functional disorders, the latter particularly prevalent among new arrivals at camp, unaccustomed to army life and its many novelties. Can it be that the men were so well studied by the draft boards and recruiting officers that the suspects were not accepted? Can it be that the work of our dental officers kept down the incidence of disabling gastric disease?

THE CHRISTIAN SCIENCE PSYCHOSIS. By Edward Huntington Williams, Los Angeles.

This is the most interesting brochure. The writer divides Eddyites into five classes, in his psychological study of them. One of these classes, he declares, is a distinct psychosis. Histories of illustrative cases are detailed.

EDUCATION IN WAR AND PEACE. By Stewart Paton, M.D., Lecturer in Neurology, Princeton University; President Eugenics Research Association. New York: Paul B. Hoeber. 1920. $1.50.

The author lays stress on the importance of training investigators to study the problem of the nervously unfit that fill our almshouses, reformatories, courts, hospitals and sanitariums. It is a huge problem, not easy of solution.

ANNUAL REPORT OF THE SMITHSONIAN INSTITUTION. 1917. Government Printing Office. 1919.

The larger part of the volume is devoted to a "general appendix," comprising a selection of miscellaneous memoirs of general interest. Those actively engaged in the promotion of knowledge, cannot afford to overlook these annual reports.

MISCELLANEOUS

NO PHYSICIAN NOR SURGEON AS YET IN THE HALL OF FAME.

To the Editor of the Southern California Practitioner,
Los Angeles, Cal.

Dear Doctor:

Soon there will be the fifth quinquennial election to the Hall of Fame. The first took place in 1900, immediately after the funds had been given anonymously for the building of a permanent monument to the men and women who had contributed most to the nation's well-being and culture. According to the constitution drawn up at the time, it was agreed that at the first election fifty national figures in art, science, and history should be chosen and that hereafter five were to be added every five years.

The method of procedure in placing a man or a woman's name on a tablet in the Hall of Fame is such as to allow no question or doubt as to the person's eligibility. The Senate of the New York University, which is made up of the dean and senior professor of each of the university schools with the presidents or other representatives of each of the great theological schools in or near New York City, chooses the electors. There are a hundred of these. Every State in the Union is represented by at least one man. These hundred men are chosen by virtue of their eminence in some branch of national culture. They fall into seven main divisions: authors, presidents of universities or colleges, scientists, professors of history, jurists, high public officials or men or women of affairs, and editors. When the names are sent in to the Senate of the university they are considered on the basis of constitutional qualification. Not the least important of these qualifications is the one requiring that the nominee must have been at least ten years deceased.

It is with delight that we see, I believe for the first time, the name of a physician among the electors, the chosen one being Dr. Charles H. Mayo, of Rochester, Minn. Perhaps this is a good omen and indicates that one of our own profession may at last be placed among the immortals. It is true that Oliver Wendell Holmes was a physician, but his name has been chosen for the Hall of Fame as belonging to Group I, authors, of which there are now 14; Group II are educators and number 4; Group III, preachers and theologians, 4; Group IV, philanthropists and reformers, 3; Group V, scientists, 5; Group VI, engineers and architects, none; Group VII, physicians and surgeons, none; Group VIII, inventors, 4; Group IX, missionaries and explorers, 1; Group X, soldiers and sailors, 4; Group XI, lawyers and judges, 4; Group XII, rulers and statesmen, 11; Group XIII, business men, none; Group XIV, musicians, painters, sculptors, 2; Group XV, eminent men outside of classes mentioned, none.

William T. G. Morton, the discoverer of ether anaesthesia, had once been proposed under Group VII, but failed in the election. I do not know whether or not the constitution of the Senate of the New York University permits a renomination. I hope there will be no barrier to renominating the "inventor and revealer of anaesthetic inhalation, before whom in all time surgery was agony, and by whom pain in surgery was averted and annulled; since whom science has controlled pain."*

The next two greatest figures in American medicine and surgery are perhaps Ephraim McDowel and J. Marion Sims. McDowel performed the first rational and deliberate ovariotomy, which he did in 1809; his patient living for 32 years after the operation. As is well known, J. Marion Sims gained for him-

self a national and international reputation by his invention of the speculum as an instrument for the treatment of pelvic diseases in women and by his perfecting the plastic operation in the vagina for the relief of vesical fistulae.

The nominations must be sent in to the Senate of the New York University, University Heights, New York City, before May first. Besides erecting the tablet in the Hall of Fame, the Senate of the New York University is now considering collecting the works, where it is possible, of all the men and women who have thus been honored by the nation. They hope in this manner to create a valuable "Americana" open for study and inspection.

I am sending this letter to as many of our American medical journals as possible so that each and every American physician who has a just pride in his profession at heart may do his share to see that a recognition to medical and surgical science equal to that of other professions, is given at last. While there may be other great physicians and surgeons in the past generations who have distinguished themselves so as to be worthy to be classed with "America's Greatest," I venture to say none has surpassed the achievements of Morton, McDowel, and Sims. These were real pathfinders in science and added to human happiness and well-being and the glory of the American medical profession.

Let every American physician send one, two or all three of these names to the above mentioned address of the Senate of the New York University, stating that this is his choice of America's greatest men for nomination for the Hall of Fame.

S. ADOLPHUS KNOPF, M.D.

*From a monument erected to Morton's memory at Mount Auburn, Boston.

N. Y. POST-GRADUATE HOSPITAL ANNOUNCES ENDOWMENT FUND GIFTS.

Mrs. Henry R. Rea of Pittsburgh, Pa., has given $100,000 to the New York Post-Graduate Medical School and Hospital's $2,000,000 Endowment Fund. This gift was announced by Dr. Ludwig Kast, a member of the Endowment Fund Committee and professor of medicine in the school, last week.

Mrs. Rea's benefaction, given in memory of her parents, the late Henry W. and Mrs. Oliver of Pittsburgh, is to be used in advancing medical standards by providing additional opportunities for post-graduate study and research to practicing physicians and surgeons.

Twenty or more scholarships are to be provided by the fund, available to doctors unable to make the financial sacrifices heretofore required in giving up their practices during the periods of post-graduate work.

Mrs. Rea's gift is probably unique among benefactions to educational institutions in that it is for the benefit of active professional men to increase their unselfishness to the community. The doctor's responsibility to the public and the handicaps under which he is placed in keeping abreast of medical progress, were particularly brought home to Mrs. Rea during the war, while serving in a volunteer capacity as field director of the Walter Reed Hospital in Washington.

Terms under which the scholarships will be available to doctors are now under consideration by the board of directors of the Post-Graduate Medical School. It is understood that this assignment will be based on the recommendations of state and county medical associations. The records of doctors for public service in the communities will also be an important factor in the choice, together with the usual professional qualifications.

In addition to Mrs. Rea's gift, James C. Brady of New York has given $50,000 towards the first $1,000,000 and has pledged $125,000 to help in raising the $2,000,000. Vincent Astor gave $50,000 and has promised an additional $75,000 after the first $1,000,000 has been raised.

The total of the fund as announced by Dr. James F. McKernon, chairman of the committee, on Saturday, is now $329,000.

AMERICAN MEDICAL EDITORS' ASSOCIATION.

The fifty-first annual meeting of the American Medical Editors' Association will be held at the Grunewald Hotel, New Orleans, La., on Monday and Tuesday, April 26th and 27th (during the week of the A. M. A. Convention) under the presidency of Dr. Seale Harris, editor of the Southern Medical Journal.

A most interesting program has been arranged and every doctor, even remotely interested in medical journalism, will find it to his advantage to attend.

It is advisable for you to make early reservation of rooms to assure you of accommodations.

HOW TO GET THE MAXIMUM EFFECT FROM CASCARA.

Success in the treatment of chronic constipation with cascara sagrada depends upon two things:

First, the choice of a reliable preparation of the drug.

Second, its administration by a method that engages the patient's interest and co-operation.

The bitter fluid extract is frequently selected for its peculiar tonic effect upon the musculature of the colon. In that event the patient is instructed to drop the prescribed dose into an empty gelatin capsule, which is then closed and taken like a tablet or pill. The initial dose may be ten drops at bedtime, or, in more intractable cases, three times daily. The idea to be kept in mind is to push the dose until a natural daily evacuation is established, then to maintain it for a time until the tonic effect of the drug is manifest. At this point, and not until then, the dose may be decreased gradually to the vanishing point.

Parke, Davis & Co.'s bitter fluid extract of cascara sagrada is recognized as standard everywhere. It was the original preparation, first offered to the medical profession nearly half a century ago.

The purchase of the Arrowhead Hot Springs property, 60 miles from Los Angeles by the Government, to be used as a convalescent home for ex-soldiers and sailors, concludes a long and varied history. The property consists of a 100-room hotel, several cottages, 1801 acres of land and very valuable hot springs. While a location nearer Santa Monica or Long Beach would have been much pleasanter for the purpose, yet it was so direly needed that we are very glad indeed to see the sale consummated. There are already 350 soldiers and sailors, veterans of the World War now being cared for inadequately, in private hospitals in California, Arizona and Nevada.

LIST OF ACCREDITED TRAINING SCHOOLS FOR NURSES IN CALIFORNIA*

	SCHOOL.	SUPT. OF NURSES.	INSTRUCTOR.
1.	Alameda Co. Hosp., San Leandro,	Mrs. Catherine Marshall,	
2.	Alameda Sanitarium, Alameda,	Kate Creedon, R.N.,	Mary F. Halliday, R.N.
3.	Alta Bates Sanitarium, Berkeley,	Alta A. M. Bates, R.N.,	
4.	Angelus Hospital, Los Angeles,	Harriet W. Pahl, R.N.,	Edith V. Martins, R.N.
5.	Burnett Sanitarium, Fresno,	Ruby Watkins, R.N.,	Mary G. McPherson.
6.	California Hospital, Los Angeles,	Anne A. Williamson, R.N.,	Helen Irving, R.N.
7.	Children's Hospital, L. A.,	L. V. Swift, R.N.,	Miss Asprey.
8.	Children's Hospital, S. F.,	Margaret Curry,	Miss Kathleen Fores, R.N.
9.	Clara Barton Hospital, L. A.,	Marie C. Hodgdon, R.N.,	Edith Hodgdins, R.N
10.	Columbia Hospital, San Jose,	Leatha O. Morrow, R.N.,	
11.	Dameron Hospital, Stockton,	Elfreda Johnston, R.N.,	
12.	East Bay Sanitarium, Oakland,	Elizabeth W. Wilson, R.N.,	Cordelia Cowan.
13.	Emanuel Hospital, Turlock,	Mrs. Justina E. Johnson, R.N.,	
14.	Enloe Hospital, Chico,	Annie Anderson, R.N.,	
15.	Fabiola Hospital, Oakland,	Mrs. Anna B. Down,	
16.	Fairmont Hospital, S. F.,	Hilma E. Johanson, R.N.,	
17.	Franklin Hospital, S. F.,	Mrs. Emily J. Thompson, R.N.,	
18.	French Hospital, S. F.,	Mrs. Leora Knox,	
19.	Fullerton General Hosp., Fullerton,	Gertrude E. Griffith, R.N.,	
20.	Glendale Sanitarium, Glendale,	Mrs. Daisy D. Harris, R.N.,	
21.	Good Samaritan Hosp., L. A.,	Mrs. Horatio Walker, Jr., R.N.,	Miss R. I. Wark.
22.	Hahnemann Hospital, S. F.,	Mable C. Wilson, R.N.,	
23.	Lane Hospital, S. F.,	Elizabeth Hogue, R.N.,	Maud Muse, R.N.
24.	Loma Linda Sanit., Loma Linda,	Elizabeth Chapman, R.N.,	
25.	Los Angeles Co. Hosp., L. A.,	Mrs. Henrietta R. Muir, R.N.,	Angelina P. Polley, R.N.
26.	Mary's Help Hosp., S. F.,	Sister Dolores, R.N.,	
27.	Mater Misericordiae Hosp., Sac.,	Annie A. Hughes, R.N.,	
28.	Mercy Hospital, Bakersfield,	Julia M. Donnelly, R.N.,	
29.	Methodist Hospital, L. A.,	Anna Cole Smith,	Miss Jacobs.
30.	Mt. Zion Hospital, S. F.,	Janet R. Cameron, R.N.,	Grace A. Bean, R.N.
31.	O'Connor Sanitarium, San Jose,	Sister Emile, R.N.,	
32.	Orange Co. Hospital, Orange,	Hazel Swall, R.N.,	
33.	Pacific Hospital, L. A.,	Laura L. Mitchell, R.N.,	Alpha Marcum, R.N.
34.	Paradise Valley Sanit., Nat. City,	Mrs. Anita M. Toppenberg, R.N.,	
35.	Pasadena Hospital, Pasadena,	Mrs. Lillian E. Jackson, R.N.,	Clifford Macfarlane, R.N.
36.	Pomona Valley Hosp., Pomona,	Edith Patten, R.N.,	
37.	Providence Hosp., Oakland,	Sister Mary Alice,	Sr. Ethelbert.
38.	Redlands Hospital, Redlands,	Ethel E. Everton, R.N.,	
39.	Riverside Hospital, Riverside,	Mary J. Currie, R.N.,	
40.	Roosevelt Hospital, Berkeley,	Thea Hauge, R.N.,	
41.	Sacramento Co. Hosp., Sac.,	Anna K. Shaw, R.N.,	
42.	Samuel Merritt Hosp., Oakland,	Emily W. Bauer,	Rachel Miller.
43.	San Antonio Hosp., Uplands,	Charlotte Black, R.N.,	
44.	San Bernardino Co. Hosp., San B.,	Gabrielle Tissot, R.N.,	
45.	San Diego Co. Hosp., San Diego,	Sara Steckle, R.N.,	Nellie E. Behnke.
46.	San Francisco Hosp., Cit. and Co.,	Susan Parish, R. N.,	Marion B. Dibblee. Hazel G. Gammon.
47.	San Joaquin Gen. Hosp., French Camp,	Catherine C. E. Reardon, R.N.,	
48.	San Luis Sanit., San Luis Obispo,	Linna G. Richardson,	
49.	Santa Ana Hosp., Santa Ana,	Margaret M. Wallace, R.N.,	
50.	Santa Barbara Cottage Hosp., S. B.,	Florence C. Johnson,	Bessie Tibbitts.
51.	Santa Clara Co. Hosp., San Jose,	Jessie W. Meikle, R.N.,	
52.	Seaside Hospital, Long Beach,	Alice Henninger, R.N.,	Daisy M. Bates, R.N.
53.	Sequoia Hospital, Eureka,	Ida M. Mason, R.N.,	Olive E. Hanna, R.N.
54.	Sierra Hospital, Sonora,	Mrs. Flora Tyack,	
55.	St. Catherine's Hosp., Sta. Monica,	Anna C. Taugher, R.N.,	
56.	St. Francis Hosp., S. F.,	Mrs. Olga Sandell,	Anne O'Laughlin, R.N.
57.	St. Helena Sanit., Sanitarium,	Helen N. Rice, R.N.,	Edith Terrill, R.N.
58.	St. Francis Hosp., Sta Barbara,	Sister M. Angela, R.N.,	
59.	St. Joseph's Hosp., San Diego,	Carrie W. Stimmel, R.N.,	Sr. Mary Thomas, R.N.
60.	St. Joseph's Hosp., Stockton,	Anna C. McDonald, R.N.,	
61.	St. Luke's Hosp., S. F.,	Grace M. Kennedy, R.N.,	Amy Pope.
62.	St. Mary's Hosp., S. F.,	Sr. M. Philomene Abren, R.N.,	
63.	St. Vincent's Hosp., L. A.,	Sister Anne, R.N.,	
64.	Union Labor Hosp., Eureka,	Isabel Leith, R.N.,	
65.	Univ. of Calif. Hosp., S. F.,	Jessie R. Greenwood, R.N.,	Alice H. Ralston, R.N.
66.	White Hospital, Sacramento,	Anna L. Styer, R.N.,	
67.	Army Schl of Nursing, Presidio, S| F.,	Mrs. Alice Flash,	Evelyn Wood.

*From The Pacific Coast Journal of Nursing, April, 1920.

SOUTHERN CALIFORNIA PRACTITIONER.

Vol. XXXV. LOS ANGELES, MAY, 1920 No. 5

GLAND IMPLANTATION: A MUCH DISCUSSED ADVANCE IN SURGERY.

BY G. FRANK LYDSTON, M. D., D. C. L., CHICAGO, ILL.

The notion that certain glands of the body bear a very important relation to its nutrition, and particularly to bodily energy and endurance, is not new. Nearly four decades ago, the venerable Brown-Sequard performed certain experiments upon himself by injecting into his tissue the juices of sex glands obtained from the lower animals. He reported an extraordinary increase in his vigor and endurance, both mental and physical, and was compelled unwillingly to father his so-called "elixir of life," a rather mean advantage to take of one of the world's greatest and most venerable scientists.

In 1849, Berthold, of Gottingen, transplanted certain glands of fowls from the normal location to the abdominal cavity and showed that the normal qualities of the birds were preserved through the effect upon the blood. He builded wiser than he knew, for he first proved the existence and significance of what we now recognize as an internal secretion of probably the most important glands of the body.

As far back as 1899, Forel, in the Italian Biological Archives claimed that the transplantation of a sex gland to any part of the body had very profound effects.

Since Berthold's day many experimental transplantations and autotransplantations of glands from the living to the living have been performed, with no resulting observations save that such transplantations were practicable.

In 1912, Hammond and Sutton reported a case of testicle transplantation, the gland being taken from a subject who had just died of hemorrhage from rupture of the liver. This was kept in cold salt solution for some hours, and then transplanted upon a patient who had just had one of his own glands removed for cancer. The object of this transplantation was merely to obtain a psychic effect upon the patient. No therapeutic effect was thought of and no scientific observations were made. Be it remarked, that the transplanted gland in this case, removed from a patient who had just died, was precisely the same as one removed from a living subject under chloroform.

Despite the fact that no scientific

observations were made nor aimed at, this was the first reported case of deliberate hetero-transplantation of a gland, for which America should have due credit. Several other Americans have done work on collateral lines for which they have been given due credit in my various writings. Be it remarked that experiments with thin slices of gland taken from living subjects (following Leo Loeb's observations of the behavior of living cells implanted in vivo or grown in vitro), are "beside the point."

My first series of articles in the New York Medical Journal October 17, 24, and 31, and November 7, 1914, contained a bibliography comprising forty-six references, probably all that were worthy of note.

Announcement of my experiments appeared in the Bulletin of the Chicago Medical Society March 7, 1914. At various times within the last few years articles by me upon the subject have appeared in the Journal of the American Medical Association, with which publication every well read medical man in Europe is familiar.

Since the formulation of the theory of internal secretions some years since, an excellent foundation has been afforded for gland work. There has been, of course, some difficulty in obtaining glands from the living subject. The work of the late J. B. Murphy and of Carrel suggested a way to overcome this difficulty by utilizing glands taken from the dead, it having been shown, first, that somatic or bodily death did not imply cell death, the tissue cells on the contrary retaining their vitality for a considerable period after the death of the subject and for a prolonged period if the tissues were frozen. Carrel made many experiments in implantation of glands upon animals which were not brilliantly successful. He did, however, try to formulate a method for the transplantation of new glands to meet the certain indications, but apparently had no thought of the medication of the recipients of these glands by their internal secretions, which, of course, would have been of no importance in the case of the kidneys, the glands with which his experiments were particularly concerned.

Every since the publication of Brown-Sequard's fantastic experiments I had entertained more than a suspicion that the venerable Frenchman was not as foolish as some believed. The formulation of the internal secretion theory, and the comparatively recent establishment of their important relations to the welfare of the animal body, convinced me that there was a germ of truth in Sequard's observations, and I determined to conduct some experiments to "prove up," recalling the fact that cell vitality of the various tissues and organs is preserved after somatic death, I determined to experiment with glands taken from a healthy dead body, preserving them by refrigeration as long as might be necessary. I decided to use the sex glands with the firm belief that the hormone or internal secretion of these glands was the most important in the entire cycle of internal secretory glands, these comprising such glands as the thyroid, the pituitary, the suprarenal and others.

With no thought of heroics and impelled by the obvious practical facts, first, that it was hardly proper to subject any one else to whatever dangers the experiment might involve, and second, that if I had asked one of my professional friends to perform the operation, I would have lost the opportunity of being a pioneer in the field, I resolved to perform the experiment upon myself. This I proceeded to do on January 16, 1914, using a testicle taken from an apparently healthy subject, eighteen years of age, dead seventeen hours. The material was placed in a jar of sterile normal salt solution and

stood outside of my office window in the zero weather for seven hours prior to the operation. The operation was performed with the assistance of my then associate, Dr. Carl Michel, now in the Public Health Service in San Juan, Porto Rico. Local anesthesia was employed, and a single gland implanted.

On the eighth day the implantation appeared to be a failure as the wound had not closed completely and there was secretion exuding. I therefore asked Dr. Michel to remove the implanted tissue. To my astonishment the gland split in two, half of it coming away in the forceps, and the other half remaining firmly attached to the tissues in which it was embedded. I was still more astonished to note that the portion removed was unquestionably living and covered with an abundance of new blood vessels, the separation of which from my own tissues produced free hemorrhage. The embedded half of the gland was allowed to remain.

In a large number of implantations upon both sexes, I have made careful observations of what I believe to be the effects of the internal secretions of the sex glands upon the human body.

The more important of my conclusions are as follows:

1. Therapeutically successful total or partial implantation of human sex glands in both male and female is practicable.

2. Glands taken from a healthy dead body at any time prior to the beginning of decomposition are, if the implantation succeeds, of therapeutic value equal to those taken from the living body.

3. The gland hormone in question is stimulant, nutrient, tonic and reconstructive, and should be beneficial in certain forms of chronic disease.

4. The development of senility can be retarded and longevity probably increased by hormones administered by sex gland implantation.

5. Gland implantation indubitably is of marked benefit in cases of defective sex development of various kinds. Be it noted that congenitally, prior to my work, these cases were hopeless.

6. It is apparently valuable in certain obstinate forms of chronic skin disease.

7. It appears to be of great value in arteriosclerosis, when not too far advanced.

8. Gland implantation is quite uniformly effective in increasing physiologic efficiency, with all the benefits accruing therefrom.

9. A number of cases coming under my observation and submitting to gland implantation have had apparently extraordinary results, notably several cases of imperfect sex development with feminine secondary sex characters in the male, and in cases where the subject had been rendered thoroughly inefficient in every way as a result of injury or disease. Operated at or near puberty, success should invariably follow the method, in properly selected cases.

10. Restoration of sexual power is practically a uniform result in appropriate cases. In one of my cases restoration was perfect, although the patient had suffered a complete castration for tuberculosis of the testes five years before.

Referring to the effects of implantation upon the skin, one experimental case of severe extensive psoriasis of long standing, that was dying from a complication of diseases resulting from alcoholism, was very remarkable, the skin disease entirely disappearing within two weeks.

The conclusion to which I arrived was that there was nothing miraculous about the effects of gland implantation. The results simply proved the powerful nutrition and stimulant effect of the

gland hormone upon every cell of the body, and especially upon the internal secretory tissues of every important hormone producing glands. A very important result is the increased nutrition and growth of any fragment of the patient's own testes that may still exist.

In my papers published in the New York Medical Journal on the dates already mentioned and in other medical journals, and in my volume upon the subject of gland implantation, published in 1917, I presented an extensive series of studies and micro-photographs of sections taken from glands which had been implanted upon the human body and removed at various intervals.

Some of my most remarkable sections and photographs were taken from a male gland implanted upon the body of an insane female, sixty years of age, the operation being done in the hope that some benefit might be derived from the action of the hormone upon the brain. At the end of four months and nine days the patient being a bit fussy by the presence of the small tumor formed by the implanted gland in the abdominal wall, the gland was removed under local anesthesia. The sections plainly showed remnants of secreting tubules, with an abundance of new blood vessels, and the hormone producing interstitial connective tissue cells or cells of Leydig.

I later performed some cross-sexual implantation experiments upon fowls, in one instance implanting a male gland upon the abdominal wall of a pullet from which it was removed at the end of seventy-five days. As in the case just previously mentioned, the sections showed new blood vessels, with an abundance of normal blood and something which hitherto had not been demonstrated by anyone, and, so far as I know, has not since been demonstrated, a beautiful picture of the hormone producing interstitial cells, a micro-photograph of which appears in my treatise already mentioned. Some of my sections showed that new blood vessels were formed containing normal blood by the eighth day after the implantation of the refrigerated organ taken from a dead body. My book contains a series of twenty-five micro-photographs of sections taken from glands which had been implanted and removed, and six photographs of the gross specimens already alluded to, removed four months and nine days after implantation. If there are extant any other illustrations of this kind, I do not know of them, and any which may exist certainly have been made since mine were published.

It is to be presumed that if my work of 1914 and subsequently was not pioneer in character, that fact would have been called to my attention. It so happens that I wrote to Carrel of the Rockefeller Institute shortly after my first experiment, informing him of the results and expressing my indebtedness to certain animal experiments of his own and of his observation of the preservation of viability in frozen tissues. In his reply, he not only failed to call my attention to any previous work, like my own, but he wrote rather discouragingly as to my prospects of success.

Apropos of the recent discussion regarding the merits of the claims of Voronoff, of Paris, that he is the discoverer of the work herein described, which claim has necessitated the writing of this article, I wish to observe as follows:

1. Voronoff's name does not appear in the practically complete bibliography on gland implantation which I published in 1914.

2. I never heard the gentleman's name until it appeared in the public press of this country, and am not aware that he has at any time published his observations upon gland implantation in a dignified manner in the medical press.

3. It is a self-evident proposition that he is more mindful of the publication of scientific matters in the secular press than he is of such matters appearing through professional channels. He was especially quick to note in the public press that Dr. L. L. Stanley, of San Quentin Prison, California, had performed ten gland implantations. Voronoff showed lively interest in this work by sending a cablegram to Dr. Stanley, congratulating him upon his success with his (Voronoff's) method. As Dr. Stanley promptly replied through the medium of the United Press to the effect that the method which he (Dr. Stanley) was using was that of Dr. Lydston, of Chicago, who had performed the operation nearly six years ago, it would seem that Voronoff's congratulations fell rather flat.

As I write, I have before me a telegram received from Dr. Stanley, October 19, 1919, in which he states as follows:

"My ten cases of gland transplantation were done according to your technic, and after close study of your book and reports in the Journal of the American Medical Association. No originality claimed by me. In my only interview to the San Francisco Bulletin Tuesday and interviews of my assistant full credit was given you. I pointed out that Voronoff was far behind the times and you had long preceded him. With my permission you reported my first case. I suggest that you give this telegram to the papers.

(Signed) "DR. L. L. STANLEY,
"Surgeon San Quentin State Penitentiary, California."

There also lies before me the official prison records of the first case operated by Dr. Stanley about thirteen months ago, and the correspondence relative to the case between Dr. Stanley and myself. The case was operated by my method, and I myself published it, giving Dr. Stanley due credit for his work in the Journal of the American Medical Association, May 31, 1919.

James Thompson, the subject, was a moron, under sentence from one to seven years for burglary. He was twenty-four years of age, mentally defective and physically inefficient. Glands taken from a subject just hanged for murder were planted upon Thompson with results which, according to the reports received by me from Dr. Stanley at various periods following the operation, were very remarkable, to say the least. At last accounts Thompson was so far improved that he was sent to a road making camp something like two hundred miles away from the penitentiary.

In noting Voronoff's sensational newspaper contributions, one of two conclusions is inevitable, namely, that he either does not read scientific publications, and therefore knows nothing of the literature of the subject in which he is posing as a pioneer, or he gives no credit to the workers in science who have preceded him along similar or collateral lines.

Taking their cue from the reports before scientific societies and from regular scientific channels, the newspapers of this country early in 1914 gave a pretty thorough presentation of the at that time startling surgical novelty of gland implantation as presented by me to my medical brethren. We perhaps can forgive Dr. Voronoff for not keeping as closely in touch with the secular press of America six years ago, as he evidently does at the present time, but can we forgive him for not reading the public press of Paris? An entire column was devoted to my work in Le Matin, Paris, March 23, 1914. It was similarly noted in Le Gaulois, Paris, March 25, 1914, and in several other Parisian papers. It also appeared in the Journal de Rouen, France, March 24, 1914.

I would respectfully submit my ex-

tensive bibliography containing forty-six references to Dr. Voronoff as an example of the courtesy which one scientist should exhibit to other workers. As these references are to articles appearing in scientific publications, and not in newspapers, they may not commend themselves to him. If my distinguished French confrére would read scientific literature with half the zeal with which he reads the secular press, it might help matters some.

That there was no lack of opportunity for Voronoff to have become acquainted with what was doing in the field of gland implantation in America, through European scientific channels, is shown by the following bits of correspondence which lie before me, namely, acknowledgements of the receipt of my work upon gland implantation, dated July, 1918, from the Rector of the University of Bologna; from the chief of the Military Medical Service of France, July, 1918; from the Director of the General Military Medical Service of Rome, Italy, September, 1918; from the Director of the Hospice de la Salpetriere, Paris, July, 1918; from the Secretary of the Royal University of Turin, Italy, July, 1918; from the Director of the University of Madrid, July 19, 1918. A copy of the book also was sent to the French Academie de Medicin.

Just a brief quotation from an article in Le Gaulois, already alluded to. "America, the country of audacious surgical experiments, gives us some hope for a cure of the insane. It is Dr. G. Frank Lydston, of Chicago, who is the author of the promising discovery. He recently grafted into insane persons glands taken from cadavers. He writes of the action of the secretions of these glands after their transplantation, etc., etc."

I have in my possession under the date of June 10, 1918, the acknowledgement of an article written in French by Dr. Adolfo Luria, of Chicago, containing a report of three of my early cases, submitted to Paris Medicale. In this acknowledgement the editor agrees to publish the article. Whether he has thus far done so, I cannot say, nor can I say what the connection is between Voronoff's remarkable exploits and the fact that the French translation of my work was sent to the Paris Medicale in care of the Faculte de Medicin.

Had Dr. Voronoff followed the literature carefully, he might have saved himself trouble in the rejuvenation of the old goat, as he would have found in my work the report of an experiment on a capon, three years old, which was remarkably restored by gland implantation.

Incidentally, if Dr. Voronoff had kept more thoroughly in touch with the scientific literature, he would have found that he is merely burrowing at the foundations of a scientific structure which was already built. The end and aim of animal experimentation is to lead to experimentations or clinical work upon the human subject. As the work upon the human subject already had been done, the gentleman's observation upon the senile goat would seem to be supererogation. As to experimental transplants from the lower animals to man, if he had followed the work of my friend, Dr. Robert T. Morris, of New York, he would have found that a decade or so ago work of that kind had been done in America.

As to his suggestion that "the bodies of accident victims should be made available to the profession, and that hospitals should be built in popular centers, to which the dead victims of railroad or street accidents can be brought immediately after the accident in order that glands may be gathered and cold storaged for the purpose of implantation" certain of my conclusions published in 1914 form rather interesting reading. For example, "opportunities should be sought in the human subject

for histologic study of implanted glands at varying periods after implantation, to determine in what degree both generative and other internal secretion gland tissues endure. Every effort should be made to so amend our laws that viable tissues of all kinds, notably internal secretory glands, shall become available to science. Legislation and public sentiment should favor scientific research. Between the anti-vivisectionists, on the one hand, and popular reverence for the dead human body, on the other, we are in sore straits. Why should there be a waste of material which, if properly used, possibly might add so much to the health, happiness, efficiency, and even to the longevity of the human race?''

It is safe to say that no European can do any work in the field of gland implantation in which he has not been antedated in principle and often in detail by American investigators. America has pretty effectually knocked the military conceit out of Europe, and it would be a blessing if the same thing would happen to scientific Chauvinism.

THE CASCARA HOUSE

An unknown drug in 1876, cascara sagrada, has become official in all of the principal pharmacopoeias of the world. In 1877 Parke, Davis & Co. began a clinical investigation of the bark, making a fluid extract of it and placing supplies without charge in the hands of physicians throughout the United States. The unique action of the fluid extract as a tonic-laxative impressed clinical observers everywhere, thus insuring the permanent future of the drug.

Then began the work of eliminating the objectionable features. Fresh cascara bark, or a fluid extract made from it, will gripe. Parke, Davis & Co. began storing the bark and testing the action of the fluid extract after varying periods. It was found that bark ''cured'' by storing for one year possessed little or no griping property; but to insure perfect results, two years of storage was determined upon, and that has since been the practice of this house.

Still cascara was bitter. The fluid extract was bitter. Was this bitterness essential to therapeutic action? ''Debitterized'' cascaras appeared, but the effective dose was found to be very much greater than the effective dose of the bitter fluid extract.

Certain manufacturers had destroyed the bitter principle of cascara with alkalies, at the same time, however, reducing the activity of the drug by 50 to 75 per cent. But Parke, Davis & Co.'s chemists discovered that the bitter principle could be removed bodily without in the least degree impairing the other constituents of the drug. Thus was Cascara Evacuant (P. D. & Co.) evolved.

From the foregoing it will be seen that three historical facts entitled Parke, Davis & Co. to the name of ''The Cascara House.'' First, the introduction of cascara sagrada to the notice of the medical profession; second, the elimination of the griping principle; third, the removal of the bitter principle.

Capt. Thomas J. Orbison, former Los Angeles physician, has been decorated with the order of St. Vladimir, fourth class, by Lieut.-Gen. Glasenapp, commander of the Northwest army of Russia, ''for services rendered the Russian cause,'' according to the citation. Capt. Orbison, who was severely wounded in the bombardment of Riga, is chief of the Letvian section, American Relief Administration, European Children's Fund, at Riga. Thousands of children have been saved from starvation through the relief activities in Letvia directed by Capt. Orbison.

SOUTHERN CALIFORNIA PRACTITIONER.

A MEDICAL, CLIMATOLOGICAL AND SOCIOLOGICAL MONTHLY MAGAZINE.

This journal endeavors to mirror the progress of the profession of California and Arizona.

Established in 1886 by Walter Lindley, M.D., LL.D.
DR. GEORGE E. MALSBARY, Editor and Publisher.

Associate Editors,
Dr. Walter Lindley, Dr. W. W. Watkins, Dr. Ross Moore, Dr. George L. Cole, Dr. Cecil E. Reynolds, Dr. William A. Edwards, Dr. Andrew W. Morton, Dr. H. D'Arcy Power, Dr. B. J. O'Neill, Dr. C. G. Stivers, Dr. Olga McNeile, Dr. W. H. Dudley, Dr. J. M. Mathews.

Address all communications and manuscripts to
EDITOR SOUTHERN CALIFORNIA PRACTITIONER,
Suubscription Price, per annum, $1.00. 1414 South Hope Street, Los Angeles, Cal.

EDITORIAL

UNIVERSITY OF SOUTHERN CALIFORNIA

By a unanimous vote the Trustees of the University of Southern California decided on April 13th, to temporarily suspend the Medical Department of the University because of inadequate endowment with which to carry it on. The University made the following announcement, explanatory of its action:

"This action should not be interpreted as a backward step on the part of the University but is really wise action as a part of the general plan of expansion now being carried forward by the University.

"The present standards for medical colleges prescribed by the American Medical Association make it imperative that a college to be rated as class A should have an endowment of from $1,500,000 to $2,000,000. This is necessary to make possible the laboratory equipment, provisions for clinic, and the development of a strong faculty.

"The medical department of the University has been doing excellent work and its graduates have taken high standing in the medical profession. Great credit is due to Doctor Bryson, the dean of the Medical College, and to the members of the faculty for doing a fine piece of work under limitations due to the lack of an adequate endowment, and it is the hope of the trustees of the University that within a short time the interest of the medical profession in Southern California, and of other friends of the University who are specially interested in the Medical College, will be such that an adequate endowment will be provided such as will make possible the reopening of the Medical School on a scale adequate to the needs of the city of Los Angeles and of Southern California in general.

"Just at present, however, it seemed wise to center the development of the University on the College of Liberal Arts, and the new $600,000 Administration building is one phase of the general plan of expansion. The aim and hope of the trustees is to develop all departments of the University on a basis commensurate with the needs of this city and its tributary territory.

"The present senior class at the Medical school will be graduated at the

end of the present college year and following that the work of the department will be suspended until further announcement.''

President Bovard and his Board of Regents have done the courageous thing in suspending the Medical School until an endowment is secured that will carry it on as a Class A College in accordance with demands of the American Medical Association. We believe that those who are controlling the educational standards of our medical colleges are doing great harm to the people of the United States. The graduates in medicine are now far smaller than they should be. The result is, that Osteopathy and others of that kind are taking possession of the cross roads, the smaller towns, and are also getting a great foothold in our cities. Putting the value of Medical Colleges entirely on the basis of a dollar, is doing away with individuality and personality.

President Garfield, who, up to the election of Roosevelt, was the greatest scholar who ever sat in the Presidential chair, who was a graduate of Williams College, said that the ideal college would be a log with President Hopkins on one end and the student on the other. We of America, are under the domination, educationally, and especially in our medical colleges, of those for whom the dollar fills the greater part of the horizon.

TRAINING OF NURSES

Dr. Wm. Duffield, representing the Los Angeles County Medical Society, recently sent a questionnaire in regard to the education of nurses to many physicians. One of the replies he received appeared in the Bulletin of the society for April 15th, as follows:

''February 24, 1920.

''William Duffield, M. D.,

''Auditorium Bldg., Los Angeles, Cal.

''My Dear Doctor:

''I return herewith your questionnaire, answered to the best of my ability.

''Note in regard to question five (5): Every hospital that has a Training School should send out three grades of Nurses. First: Admitting the young woman with a Grammar School education, giving her one year's training. After this year's service and training she is to be given a certificate as a Practical Nurse and so registered by the State.

''Second: A two years' course, where the applicant is only required to have a Grammar School education, then take two years training, at the close of which she is to be given her diploma as a graduate nurse and to be so registered by the State.

''Third: Where the applicant must have a High School education or its equivalent, and after a three years' course, be given a diploma as an Official Nurse and so registered by the State. At present the Grammar School graduate has no place in our system of nursing, yet there are six young women who graduate from the Grammar School course to where there is one graduates from the High School course: thus shutting out all those who have only a Grammar School education, reduces the number of possible nurses by five-sixths; in other words, under this suggestion which I give you, there would be six possible nurses to where there is only one, if you require a High School education. Further, I believe that the Grammar School graduate, who has only had one year's hospital training, will be more useful in the homes where the bread winner only receives $100.00 per month or less, than the High School graduate who has received her three years' training. She will be closer to the real people. These three classes of pupil nurses could be given training simultaneously in the same training school with very little adjusting of courses.

"Note to question eleven (11): The Churches and Church Hospitals that are doing a Missionary work that extends around the globe, should furnish in each city, opportunities for training young negro women, so that there would be enough graduate negro nurses to care for those of their own race.

"A nurses' bureau or directory under the management of the Los Angeles County Medical Society is not a vital necessity. There are several excellent directories in Los Angeles that have done valuable work for years. One of these uses the money collected for caring for members of their Alumnae during times of sickness or distress from other causes. To wipe out all of these directories, has it's hard side.

"Yours very truly,
(Signed) "WALTER LINDLEY."

NON-MEDICAL PRACTITIONERS OF THE MEDICAL SPECIALTIES

Medicine, the noblest of professions, is the most despicable of businesses. The worshiper of mammon is a decidedly incongruous figure in the altruistic field of the practice of medicine. The essential respectability that has long been recognized as a characteristic of the honorable members of our profession, is attractive to the commercially inclined unqualified practitioners of the healing art, and is often unsuccessfully aped by them. A stronger attraction to the unqualified non-medical practitioners of the medical specialties is afforded by the possible financial returns. The remuneration of the practice of medicine is absurdly low for those who are properly qualified, so much so that the practice of medicine is no longer regarded as an attractive field in a financial way. But to the unqualified the practice of the medical specialties promises financial returns out of all proportion to the true worth of the services they are able to render in this or any other way, so that they are tempted to be unscrupulous in the extreme and to resort to all sorts of expedients to enable them to continue in their dangerous practices.

At the Santa Barbara meeting, our State Medical Society declared that the administration of an anesthetic is always the function of a legally qualified medical practitioner; that the administration is best performed by physicians specially instructed or who have made a specialty of this subject; that wherever available, hospitals and public institutions, where anesthetics are administered, employ only physicians as anesthetists; that the Society condemns under all circumstances the training and qualification of lay persons as anesthetists; that no hospital shall be deemed to have acceptable standards, which charges a fee for anesthetics unless such anesthetic has been administered by a legally qualified physician.

The more closely this action of our State Society is scrutinized, the more we must be impressed by the good judgment it portrays.

A more complete presentation is embodied in a report recently received by the Los Angeles Obstetrical Society, a branch of the Los Angeles County Medical Association, after a special committee had spent considerable time investigating the rather intricate subject referred to it. The following is the report:

REPORT

"At the November, 1919, meeting of the Los Angeles Obstetrical Society, the undersigned were appointed a committee to report some practicable method whereby the Society might effectively oppose the practice of medicine by non-medical practitioners, notably the practice of obstetrics by non-medical practitioners of obstetrics, the practice of anesthesia by non-medical anesthetists, and the practice of Roentgenology by non-medical X-ray men.

It is inconceivable that the lack of

medical education would enable any individual to more safely practice any of these medical specialties. Non-medical practitioners engage in the practice of medicine as a business only for the money there is in it.

The non-medical practitioners of obstetrics, as a class, are probably the most ignorant and disreputable of the non-medical practitioners of medicine. There is no real reason for the continued existence of the non-medical midwife and her awful toll of mortality and morbidity. The non-medical practitioners, who make a business of administering anesthetics, are not safer anesthetists because ignorant of medicine; however adept through practice, they will continue to be handicapped through their lack of medical education. They may not be so safely entrusted with the human lives under their care as they would be were they educated in medicine. Graduate nurses receive some instruction in anesthesia so that they may be more safely employed as anesthetists. When so employed, they are responsible to the surgeon in charge of the case.

The non-medical X-ray men are engaged in the practice of Roentgenology chiefly through the cupidity of the Medical Profession. No one would contend that it is safe for non-medical practioners to engage in the administration of strychnia, yet we supinely permit non-medical X-ray men to continue their nefarious practice of subjecting patients to the action of the Roentgen rays, which are admittedly much more potent for evil than is strychnia. No one is more competent to practice Roentgenology because of a lack of medical education. The non- medical X-ray men are tolerated chiefly because they work cheaper than medical men, and they are not influenced by any code of ethics or conscientious scruples whatever. The dentists do not permit them to make diagnosis, but in the broader and more important realm of medical and surgical diagnosis they are unhampered.

RECOMMENDATIONS

General. So far as is in our power we should make unpopular the practice of encouraging non-medical practitioners in the practice of medicine. We should emphasize the fact that the medical specialties should be practiced only by medical practitioners. Furthermore, in the practice of medicine, diagnosis is as important as treatment. The laity as well as the profession should realize that the practice of medicine is not synonymous with therapeutics.

Obstetrics. In the way of legislation requiring an educational standard of those engaged in the non-medical practice of midwifery, the present law is probably as good as it is practicable to secure at present. It is securing good results, and legislative tinkering might result in its overthrow or modification to such an extent as to make it less effective for good. We should be unstinted in our scorn of those who profit unjustly through the practice of non-medical midwives.

Anesthesia. Possibly it must depend upon the conscience of the individual practitioner, whether he feels justified in entrusting the lives of his patients to non-medical anethetists. Some legislation would seem justifiable. The anesthetics are undoubtedly drugs of high potency, and their use on the human body should be limited to those qualified to most safely employ them. In this contemplated legislation, the medical and dental professions should unite in their opposition to the non-medical anesthetists. In this connection, it should be remembered that the dentists are really legitimate practitioners of a medical specialty, and are trained in the use of anesthetics. If it is true, as some declare, that there will not be enough medical graduates to fill the interneships in hospitals the coming year, the problem of securing medical anesthetists may become acute. So

long as medical anesthetists are available, they should be employed in preference to non-medical anesthetists. The administration of anesthetics is one of the most important functions of the interne. It should be impossible for an interneship to be served without gaining a knowledge of anesthesia. We would recommend that the practice of regularly employing non-medical anesthetists be discountenanced. It may be cheaper to employ them, but it is not fair to the patient nor to those of our profession who are making a specialty of the practice of anesthesia. Graduate nurses should not be encouraged to make a specialty of anesthesia.

Radiology. Radiology, as applied to the human body, is distinctly a medical specialty. We would recommend that the application of Roentgen rays to the human body be limited by legislative enactment to those licensed as properly qualified. With all the acute shortage of radiologists during the great war, the U. S. Army X-ray Manual limits the non-medical technician to the examination in "standard positions" of the clavicle, shoulder joint, elbow, wrist, hipjoint, knee, ankle and foot.

The definite statement is made, on page 193, that "These are the only parts of the body which the X-ray manipulator should be allowed to examine. All other examinations require the personal attention of the roentgenologist". In civil life, non-medical X-ray technicians in their dealings with the human body, should be under the direction of medical radiologists. We would declare unethical the subjection of patients to non-medical X-ray manipulators who are not under the direct supervision of competent medical radiographers. Furthermore, we would remind our legislators that diagnosis is as much the practice of medicine as is therapeutics, and is often more important. We deem it unethical and dangerous to permit non-medical X-ray manipulators to make diagnoses or to engage in therapeutics. We believe the Roentgen rays should be classed as potent drugs, the improper use of which is dangerous.

So much for the consideration of the subject by our societies. There is no reason to encourage the continued existence of the dangerous midwife. Non-medical X-ray men are useful as technicians, but their range of activity should be so circumscribed that they will not be a menace. Lay anesthetists should be used only in emergencies. Nurses should be trained in the administration of anesthetics, since they are so often needed for that purpose in emergencies; but they should not be encouraged to take up anesthesia as a specialty unless they graduate in medicine so as to properly qualify for the specialty.

EDITORIAL NOTES

Dr. Joseph Cook of Redlands has located in Banning.

Dr. B. E. Merrill has been appointed Health Officer of Santa Paula.

Dr. Ezra S. Fish has opened offices in the Marsh-Strong building.

Dr. Henry H. Sherk of Pasadena has purchased a beautiful summer home in Montecito.

Dr. T. A. Williams of Pasadena has recently established the Roosevelt Hospital in that city.

The jury that tried Dr. Herman Silverman, in what was called the "Blood Test Fraud," disagreed.

It is a surprise to many to learn that there is hook-worm and amoebiasis in several localities in California.

Dr. Alfred J. Downs of Los Angeles has gone to Europe to spend six months in the hospitals of London and Paris.

Dr. J. H. Mallery who had been in the army for over two years has opened offices in San Diego with Doctors Little and Donnel.

Dr. Fletcher G. Sanborn has been appointed as Deputy for the United States of the Public Health Service, with headquarters in Los Angeles.

Club women of Los Angeles have recommended that a bounty of $50 or $75 be given to needy, expectant mothers resident in the State one year.

At a recent meeting of the Southern California Alligator Pear Association, Dr. W. W. Hitchcock read a paper entitled "Surgery of the Avocado Tree."

Dr. Oliver Dwight Norton, age 60 years, colonel in the Medical Service, died in Montecito, March 20th. Col. Norton was well known in Los Angeles.

Dr. Robert W. Hartwell, who has a record of service in both the Spanish-American war and the recent World War, has been chosen as City Physician of Santa Barbara.

Dr. William Verne Van Norman for 22 years a practicing physician in Los Angeles, died March 26th from influenza. He was one of the most prominent homeopathists in this city.

Dr. Louis Hough, of the U. S. Health Department, recently stated that 13 per cent of all deaths in California are from venereal diseases and that this cause is indirectly the cause for many other deaths.

There have been 50 cases of rabies in Stockton since January first. The disease has recently been reported in several counties in California with one death—a child—in Fresno early in April. Rabies had not previously been alarming in California since 1912.

Dr. R. K. Macklin, discharged from the Medical Corps, who was delayed because of his wounds received in France more than a year ago, has finally returned home and is able to resume his practice.

Dr. Geo. H. Kress, Dean of the Los Angeles Medical Department, University of California, announces a course in Operative Surgery beginning April 20, 1920. For catalogs and general information in regard to this and other courses address 737 North Broadway, Los Angeles, or telephone Broadway 4538.

Dr. David A. Conrad died at his home in Montecito, April 6th. Dr. Conrad had been in service through the war and laterally on duty at the Letterman Hospital in San Francisco. He was 49 years old and had been a resident of Santa Barbara and vicinity for 18 years. He is survived by a widow and two sons.

At a meeting of the Orange County Medical Society held recently, Dr. W. C. DuBois of Santa Ana was elected president of the society. Other officers elected were: Vice-president, Dr. J. H. Lang, Fullerton; Dr. J. C. Crawford, Orange, secretary; Dr. R. A. Cushman, Santa Ana, treasurer. These officers are to be installed at the annual banquet of the association next month.

Clemenceau of France in his younger days practiced medicine in New York; Gen. Leonard Wood, who is a prominent candidate for president of the United States (and an ideal president he would make) is a graduate of the Medical Department of Harvard, while Sir Auckland Geddes, the newly chosen ambassador from Great Britain to the United States, was formerly professor of Anatomy in McGill University. It would be a blessing to this nation if a larger proportion of physicians and a smaller proportion of lawyers occupied the offices.

Dr. Robert K. Macklin on arriving at his home in Pasadena, after several years' service in the army, was welcomed by his professional friends and presented with a beautiful automobile. While in France he suffered from a fracture of the hip and as a result spent 18 months in various hospitals as a patient. As he has not fully recovered, this present from the doctors of Pasadena will be doubly welcome. Such an act goes far ahead of honied words of alleged gratitude and all that.

Dr. Kenneth A. J. MacKenzie, dean of the medical department of the University of Oregon and a surgeon of national reputation, died recently of heart disease superinduced by influenza. He was 60 years old and is survived by two daughters and two sons. Ten years ago he opened a new field of possibilities in his profession by the development of nerve grafting. Dr. MacKenzie was born at Cumberland House, Manitoba, and was a graduate of McGill University, Montreal, and the Royal College of Physicians and Surgeons, Edinburgh, Scotland.

Dr. Frederick M. Rossiter and Dr. Almer H. Thompson have been having a mix-up in court, where Dr. Rossiter sued for $25,000 damages. The daily press reported the case as follows: "The plaintiff alleged that about Oct. 14, 1918, Dr. Thompson turned over all his practice to him and told him he would remain away and not seek to invade that field again. Dr. Rossiter declared he gave up a good practice in another city and located in Burbank. Instead of remaining away in accordance with his alleged agreement, Dr. Thompson returned and opened offices in Burbank and resumed his former practice, the plaintiff declared. In his answer, Dr. Thompson denied he had agreed to remain away from Burbank, except for the time he was serving in the United States army."

Dr. Charles Lee King, for the past twenty-seven years a prominent resident and physician of Pasadena, former president of the County Medical Society, died at his home. He had been in poor health for some time but had been genuinely ill only a few days. Dr. King was a member of a prominent Ohio family. He was a brother of Dr. Henry Churchill King, president of Oberlin College. He was born in Oberlin, sixty-seven years ago, and studied medicine at Chicago Medical College, Harvard and Johns Hopkins. He practiced in Michigan before coming to Pasadena. During the war he was a member of local draft board No. 2, and regularly gave his salary from that office to the Pasadena Y. M. C. A., of which he was a director. He was an active member of Pasadena Presbyterian church, the Twilight Club and other local organizations. Mrs. King and two sisters, Mrs. S. T. Phillips and Miss Elizabeth King, survive him, beside his brother. Dr. King was a dependable friend, an able physician and a valuable citizen. He will be sorely missed by the profession of Southern California.

Poison Ivy Treatment: The season of picnics, mountain hikes and poison ivy is at hand, and the Journal of the A. M. A. issues a timely statement of treatment as follows: "In considering a rational treatment, it should be known that the irritant substance is soluble in alkalis, in gasoline and in alcohol, but is precipitated by lead acetate. At one time lead washes formed a popular treatment for ivy poisoning. They accomplish at best the precipitation of the poison in situ. It must then be removed in some way to avert further danger; and many persons are susceptible to intoxication by lead as well as by ivy poison. The widely advocated scrubbing with soap and hot water is efficacious only so far as it mechanically removes the toxicodendrol before it

penetrates the skin. To spread the toxic agent inadvertently by washing rather than to remove it can only aggravate the danger. This applies particularly in the case of commonly used alcoholic lotions; their use must be thorough and liberal lest they merely serve to dissolve the poison and hence distribute it. The treatment with hot alkaline solutions of potassium per manganate is not as widely recognized as it merits to be. The principle involved consists in the destruction of the poison by this oxidative agent. The discoloration of the skin by the reagent can readily be removed by lemon juice or other means.''

The Trained Nurse and Hospital Review for April says:

''I have had many strange experiences as a woman doctor in the Balkans,'' says Dr. Lulu Hunt Peters, of Los Angeles, who was recently decorated with the order of St. Sava by the Crown Prince of Serbia. ''But the oddest operation I ever performed was in Gostivar, Serbia.

''Early one morning a well-dressed Turkish merchant called upon me. He explained that he wished me to operate upon two of his daughters, whom he wished to marry off, and also upon one of his boys. He spoke broken English and good French, but I could not understand what the operations required were.

''Seeing me hesitate, he offered me several valuable rings and bracelets. I assured him, however, that I would be glad to do what I could without compensation. Accordingly, I followed him to his harem.

''After some parleying with one of his elderly wives, he finally called forth his daughters. They came from behind a curtain like two automatons, having evidently been kept in waiting there. Both girls upon command raised their veils. At once I saw why they had not married earlier. Both had hare lips. So had the little boy.

''Two days later I performed operations upon the two girls and the little boy, on my day 'off' from Red Cross work. When I left two months later the hare lips had disappeared and the operations had left but a faint trace in all three cases.''

SOUTHERN CALIFORNIA PRACTITIONER.

Vol. XXXV. LOS ANGELES, JUNE, 1920 No. 6

THE PREVENTION OF THE DISEASES OF WOMEN*.

BY W. O. HENRY, M.D., LOS ANGELES.

Mr. President and Members of the Society:—It is often a matter of great surprise that so large a proportion of civilized womankind should be afflicted with some form of female disease. Not only is it a wonder to women themselves, but educators, all sorts of investigators and doctors as well, can but marvel at the fact when they stop to consider how widely prevalent these diseases are and how comparatively few women are wholly free from them.

As physicians, it is today a very important part of our calling to prevent disease. But before preventing them successfully we must know about the cause or causes which produce them. What then, are some of the prominent causes of these prevailing diseases and how shall we prevent them?

First:—The first cause to which I call your attention is that girls are not well born. Every child, boy or girl, has a right to be well born. Parents in precarious or delicate health have no right to bring sickly, puny and diseased children into the world. It is generally conceded that syphilitic and markedly tubercular parents should not have offspring.

But why should we not go further and insist that every unborn child, not being able to defend itself, should be duly protected by public opinion and if need be by the state in having healthy, vigorous and sound parents. It should be remembered that mothers, **chiefly** give body, vitality and brain power to the children. The neurotic fathers from too much alcohol, tobacco or other drugs, as well as the weak and puny fathers from any cause, impart a weakness to the offspring that woman's utmost ability cannot always overcome. Were it not for the physical and mental ability of women to overcome the defects of men to a considerable extent, the degeneracy of the race would be greatly increased.

Of course, mothers, who from the use of drugs, too frequent childbearing, too hard work, too long hours or positive physical ailments from any abuses, when they are broken down and have become invalids and nervous wrecks, cannot bear strong and vigorous children with good bodies, normal nerves and mental poise. Whilst we do not now believe in the old theory of birthmarks, yet we do believe in the phys-

* Read before the Los Angeles County Obstetrical Society, April 13, 1920.

ical, nervous and mental organism which the mother imparts to her child by the physical, nervous and mental condition she is in while carrying that child. That is one reason why so many of us favor giving the working women rest and wages before, during and after their confinement in order that they may give better bodies to their offspring and be themselves the better for this rest from their industrial pursuits. To insure the best results the mother must really want the child she is to bear. She must have sufficient good food, rest, fresh air, sunshine and exercise without being overburdened with care, anxiety, sexual indulgences or other worries.

Any excesses of drink, stimulants or excitements, will have an injurious effect upon the child. It will come into the world with a handicap in its mind, nerves or other parts of its body. Fathers, mothers, and the general public ought to know and appreciate these important truths and act upon them in the interest of the race. Let girls then be better born, with good nervous and physical organism if we would prevent the extensive occurrence of diseases peculiar to women. If we cannot accomplish this, we will make but little progress in the prevention of these diseases. A good nervous system is an important stone in the foundation for a body able to meet the stress of human life. And this can only be brought about by both fathers and mothers uniting in the effort.

Second:—In the second place, lack of proper parental training and care of girls is a most important factor. There is too great stress laid upon mental training and education, and too little thought given to suitable physical development.

As a rule, girls are sent to school too young and are crowded too fast in their studies. Mothers being busy with the home and social duties do not like to be bothered with the children about all the time, hurry them off to school to get rid of them at least part of the time. Or others simply follow the customs of the times and send them to school to have their girls get an education as fast as their playmates. Then having started them in school they must be crowded to keep up with their classes and they must take all the branches the others do and if music or some extra studies can be worked in, that means so much gained and it proves to fond parents that Mary is just so much brighter than other girls and insufficient thought is given to the question whether or not Mary is fit by age and physical condition, to do all this work.

All such tasks as call for undue physical or mental strain either in time or effort, works injury to the girl which is bound to tell upon her energies and powers later in life, not only to her personal harm, but to that of her offspring. Plenty of air and sunshine, the outdoor life, play and exercise, are almost as important to the growing girl as are good food and plenty of sleep in healthful surroundings. Then, too, the help given mother in the home which all girls should early learn, may be supplemented with well guided physical training in the schools until their bodies are symmetrically developed and their outdoor sports if wisely directed will add greatly to their bodily vigor and physical welfare. The training of many of our boys for the recent war gave us a most happy and convincing demonstration of the untold good to be accomplished by judicious and intelligent training of the body.

If this compulsory military training be put in force for our boys all over the land, it will raise the physical standard beyond anything educators have ever dreamed.

Some such training for girls, only modified to meet their special needs, would add to the health, vigor and

longevity of the race a goodly sum, to say nothing of the happiness which would follow. Child labor, is another evil which can hardly be too strongly condemned for girls merely from a health point of view.

Third:—I am one of those who believe that both girls and boys should be early taught in a clean, pure and healthful way the things they ought to know about sex. For too long has a false modesty, a silly public sentiment kept these things out of the schools and a clean, healthful scientific moral side out of the public press.

Here again the war came to our rescue and for urgent reasons the public was informed somewhat about the venereal diseases and a sentiment has been awakened more favorable to a sane discussion of the sex problems, and a hope for better things is before us. Girls should be taught the essential things of their sex life and thus be prepared for menstruation, the normal sexual relations and the functions which belong to them. When the Creator made our bodies with their numerous organs and varied functions they were all clean and pure and holy; and it is only when we abuse them or put them to some forbidden use, that they become impure and unclean. And it is this aspect which we should all know and teach in the interest of the health of girls and of mothers. Ignorance is by no means innocence and we must teach the truth, for that alone makes free. Menstruation, sexual intercourse and childbearing are normal physiological processes when the time arrives for them and are no more unclean than eating a meal or taking a bath when the proper time comes. If any of these processes are interfered with or abused, disease, disaster and death may occur. Whenever you run counter to a law of nature you may expect trouble of one kind or another. As a matter of health, of morals or of religion, you must obey the laws of health or morality and religion; you must obey the laws of health or morality and religion, or pay the penalty of the broken law. Before you can obey any law you must know what it is. What therefore are the laws of the sexual life?

We know some of them and these must be known by women before they can obey them. So far then as we medical men know them, let the girls and women, according to their needs and ages be instructed. But you say, we do not obey the laws we know why bother about learning others. Yet it seems cruel and almost inhuman, to know how many of these female diseases may be prevented by simply obeying the laws of health and then not let the girls and women know what they are until the damage has been done and they learn from sad and awful experience what might have kept them well.

If girls knew about menstruation and were properly prepared for it, they would be frightened when it appeared and try with cold water to stop the flow by which they sometimes bring on disease. If girls knew that the first intercourse might produce a pregnancy, some at least would be saved from criminal abortions and death. If they knew that every impure sexual relation might give them a venereal disease from which they would never recover, some who now fill premature graves, and others who are lifelong invalids, might have been saved from the damage done on account of broken laws. If women knew that pregnancy is a normal physiological process, and that she who interferes with it is not only a murderess, but is likely to bring on pelvic weakness or disease which may never recover, and which sometimes results in death, because it is violating a most important law of health, some of them would be restrained and life and health would be conserved.

That a considerable number of women suffer chronic pelvic lesions as a result

of abortions is only too well attested by the findings of all men of experience in the diseases of women.

Fourth:—The next most important preventive measure is to have women properly confined. It is said that twenty-three thousand American women died in childbirth in 1918 and the young mother deaths is the highest proportion in the U. S. of any of the nations. In twelve hundred cases confined at the University of California Hospital, Dr. Lynch reports 54% of them had posterior uterine displacements from one to twelve months after delivery.

That many women very correctly trace their ill health to a certain confinement is well known to us all.

Women infect themselves or their attendants carelessly infect them at these times and they have remaining some chronic results which keeps them on the sick list and frequent callers at the doctor's office. Other women get up too soon after labor and undertake their household or other daily duties before they are physically able to do so and thus get a uterine displacement or subinvolution which later brings them to the physician. Or if they have a perineal laceration or a torn cervix which is not repaired they must needs have a variety of ailments which sooner or later demands attention. While we are still in the dark as to the cause of cancer, practically all observers agree that a badly torn cervix unrepaired, is often the seat of cervical cancer and that the only prevention is a good repair long before malignancy appears. Therefore no woman can be said to have had proper confinement who is lowed to go without repair of a lacerated cervix at the proper time. And whilst a torn perineum is not so serious, yet because of the need of this support in all women, it should be repaired when torn as a prevention of discomfort and more serious trouble.

I am well aware of the fact that certain teachers are widely claiming that many times a retroflexion does not harm and will not produce symptoms; still I believe the uterus should be in its normal and anatomical place. And I feel sure that a woman is not properly confined who is allowed to go from the hands of her accoucheur with a retroflexion. Infections, tears and misplacements should as far as possible be prevented with the confinement, but, if they do occur then they should be corrected as promptly and as fully as possible in the interest of the future health of the mother.

We cannot too often nor too vigorously emphasize the importance to the mother, as well as to the child, of having her nurse the baby. It is altogether too easy now days for some mothers to shirk the responsibility of nursing their children. If they can be impressed with the physical good which will come to their pelvic organs and therefore to their whole system, by obeying this law of nature, some of them will be more willing to discharge this duty. As to the binder, I can see no objection to its use if properly applied, and in fact, I believe it adds comfort to the patient and does some good. But if applied as some women want it, to preserve the figure, then it may become a menace to health by crowding the uterus out of place.

Fifth:—Over-sexual indulgence and the venereal infections are well recognized as fruitful sources of disease and are preventable only by obeying the laws of sexual health.

Of course, all sexual indulgence outside of wedlock is immoral, and I doubt not is a physical injury, because it is a violation of a fundamental law of health; but the excessive indulgence either out or in wedlock is clearly and often a cause of disease. I am personally inclined to the opinion that all of the venereal diseases were originally started by promiscuous sexual relations. That is to say, a number of men

through sexual relations with the same woman carried a great variety of innocent germs, which crossing and recrossing or being influenced by one another in the new conditions where they are thus located, finally develop a virulent strain very like the result obtained by Rosenow with streptococcus. At least this is now the penalty men are paying all over the world for violating the laws of health pertaining to the sexual system. Neurasthenia and the old-fashioned hysteria are often the result of some pelvic disease or defect in women.

The nervous system here is primarily at fault, and then any sexual disturbance either overindulgence or lack of normal relations may be, the deciding factor which brings on the attack.

The fact that women often do not know when they enter the marriage relation, that one of their duties is to gratify the normal passions of their husbands, and are therefore not prepared for it and many times rebel against it, and think men brutes because they indulge; leads to repulsion, aversion, nervous disorders and drives husbands where they may get the venereal diseases which they bring home to their wives and thus not only make unhappy homes, but increase the host of women afflicted with female diseases. Who has not seen Dyspareunia and even Vaginismus result in this way. That many women marry, only to have someone who will support them, give them a good time, take them out of the old maid class or for other selfish motives; and then revolt at the sexual embrace or give the husband his rights in such an ungracious and repulsive way as to drive him entirely away, is only too well attested in our every day life to need further comment.

Sixth:—The prevention of conception by the many methods used while possibly not so common a cause as those already mentioned, still I believe it is of sufficient importance to demand our attention. The very first object in creating the sexes was to propagate the race. And therefore women should not, as they many times do, refuse to bear children.

Sprague, a very careful and painstaking statistician, has shown that in order to keep up our population to its present ratio the married women should all bear about four children. But it is found for example, that the married graduates of Wellesley only bear .87 children. And that only forty-eight per cent of these graduates have married after a period of twenty years or during the childbearing age. Are the educated women shunning marriage in order to escape this God-given task?

Do these modern so-called progressive ideas of woman suffrage, the business career, woman's club life, and the pleasures of social life take women out of their divinely ordained career? Or does the fact that men do not and the state does not require them to fulfill their moral and legal obligations to their wives, deter women from entering the marriage relations? Or does the more widely disseminated knowledge that women now have of the true meaning of "sowing wilds oats" keep them from matrimony?

The census for 1910 shows thirty per cent of our young women single. In France before the war the death rate exceeded the birth rate and the public was justly growing alarmed. Sir Rider Haggard, at the sitting of the national birth rate commission in London, said, "In our educated and professional classes, many causes combined to prevent increase, as was evidenced by the number of 'only sons' killed during the war. The maternal instinct is not highly developed in a considerable proportion of modern women nor is the paternal instinct always strong in men. It is not right that civilized woman should become a breeding machine; but if able to do so without injury to

health, a married woman should enrich the population by four or five children. Yet the average number of children in the classes mentioned is only two and three-tenths.'' The gynecologist, Dr. Amand Routh, read a paper before the church congress on the birth rate in which he said, ''The natural increase of population for the first time in our statistical history has ceased; for during the six months ending March 31, 1919, the deaths in England and Wales exceeded the birth 126,445. Smaller families in the upper and middle classes are mainly the result of widespread knowledge of how to prevent conception.

''Is it ever right to avoid conception permanently in the marriage state? No, unless for medical reasons.

''The ideal would be that no method of conception control except abstinence should be used without previously obtaining the advice of a physician. The question to decide is whether the relatively poor who have large families shall be so educated in all the methods of conception control that they may have the same knowledge and be supplied with the same appliances as the rest of the community, or whether we should not concentrate rather on educating the middle and upper classes and warn them through the agencies of the church and the medical profession of the dangers, national disloyalty and moral wrong of contraception.

''Our nation owes its position in the world to its former large families, and cannot have too many children today for it to protect and populate its colonies.''

Another able statistician, L. I. Dublin, says, ''There has been in this country for the past forty years a steady decrease in the birth rate.'' He makes these very wise and suggestive statements. ''The bearing and rearing of children is costly both in energy and in funds and must act as a check on personal ambition and on the enjoyment and freedom of social life.

''A family of four children requires all the attention of the thoughtful and capable woman. Her success as a mother will be at the expense in the majority of cases of her achievement in other fields.

''It is not asking too much that such a woman should be favored with the admiration of the community in which she lives and not, as at present, with its commiseration and pity.''

The bulletin of the Indiana State Board of Health says, ''The greater proportion of people are born healthy and their way of living makes them sick. The people of America are only fifty per cent efficient on account of ill health and disease. Apparently our population is one hundred million, actually it is only fifty million.

''This is the result of wrong feeding, cranky immoderation, not enough air and sunshine, impure and insufficient water drinking, alcohol, caffeine, and nicotine addiction and our awful and absurd use of drugs and patent medicine.''

London Tid-Bits says, ''Before the outbreak of the war hundreds of women in England who found consolation in the weed smoked from fifteen to twenty cigarettes a week. But not so now, for the smoking craze has made such headway that there are thousands at the present time who think nothing of smoking one hundred to one hundred and fifty cigarettes a week.'' And if reports are true and observations are any indication of the facts, American women are not far behind their English sisters.

Bishop Wakefield of Birmingham in writing upon the question of decreased birth rate in England, says, ''I am convinced that the chief factor in the rapidly declining birth rate is a sense of anxiety as to the wherewithal to provide for and bring up the children that are born. The attitude of thousands of people today is simply that

they cannot afford to have children unless conditions are altered. The great evil is the high cost of living, but when is that going to come down? I for one do not know.'' That the economic conditions have something to do with the refusal of women to bear children we cannot doubt. When we are told by the health officer of New York City that of the one million school children there, two hundred thousand of them are undernourished; and when an English authority estimates that between ten and fifteen per cent are undernourished; when the Rockefeller foundation reported that ten million or about one-tenth of our entire population are living in poverty and that four million of these are real objects of charity; and when the Illinois Commission of Labor Statistics reports that one-half of the intelligent workingmen of that state are unable to earn enough to support their families and are forced to depend in part upon the labor of their wives and children, we cannot doubt but there is some question of food, clothing and shelter entering into the problem. Nor should we as intelligent members of society fail to lend our earnest efforts in helping to correct these evils. The foregoing facts make a most forcible illustration of how intimately health and economic questions are associated and show that we must be prepared to take a broad and comprehensive view of all the problems of life, if we would really prevent disease in general and the diseases peculiar to women in particular. The public may be aroused by the cry of the ''Yellow Peril,'' and economists may be alarmed by the Japs getting such a large and strong foothold in the fields of agricultural industry; but if the American women refuse or fail to bear sufficient children, the Japanese and other foreign women will keep up the needful human production just as the Japs and foreigners will meet the farming needs of the country when American men fail or refuse to do it. Somebody is going to supply human beings to people this beautiful world.

Will it be the cultured, civilized, educated American women, or must we depend upon the foreign, ignorant, uncultured and half civilized? The women alone can answer. Of course, if it were purely an economic or social question, we as physician, would not be primarily interested, but since the methods used to avoid childbearing are a menace to public health, that phase of it is our peculiar task.

Our business, therefore, is to lay stress upon the fact that any methods of preventing conceptions, except reasonable abstinance in the marriage state is more or less of a physical injury to the body of woman and may result in pelvic or nervous disease not easily cured. The laws of health must be obeyed if health is to be maintained. No one can persistently disobey them with impunity; and the sexual system being so intimately associated with the nervous system and both being so highly organized the laws pertaining to them are all the more important for our daily observance.

Then too, when women are so set against childbearing and resort to all kinds of expedients to prevent conception, it but intensifies their horror when they fail; and no wonder so many of them go further and secure a criminal abortion which in France was reported for 1912 to be 500,000 when the births were only 742,435. In our own country while the number is not so large, it is surprisingly great and seems to be increasing. Of course, the criminal abortion produces more deaths and a much greater morbidity than the means used to prevent conception; but they are so closely associated that we must not overlook either one, although the latter is more prone to produce simply nervous disorders than the former.

SOUTHERN CALIFORNIA PRACTITIONER.

A MEDICAL, CLIMATOLOGICAL AND SOCIOLOGICAL MONTHLY MAGAZINE.

This journal endeavors to mirror the progress of the profession of California and Arizona.

Established in 1886 by Walter Lindley, M.D., LL.D.
DR. GEORGE E. MALSBARY, Editor and Publisher.

Associate Editors,
Dr. Walter Lindley, Dr. W. W. Watkins, Dr. Ross Moore, Dr. George L. Cole, Dr. Cecil E. Reynolds, Dr. William A. Edwards, Dr. Andrew W. Morton, Dr. H. D'Arcy Power, Dr. B. J. O'Neill, Dr. C. G. Stivers, Dr. Olga McNeile, Dr. W. H. Dudley, Dr. J. M. Mathews.

Address all communications and manuscripts to
EDITOR SOUTHERN CALIFORNIA PRACTITIONER,
Suubscription Price, per annum, $1.00. 1414 South Hope Street, Los Angeles, Cal.

EDITORIAL

FRENCH POLYGAMY?

The following is an up-to-date editorial in the Medical Record:

The grave question of depopulation in France that is frequently discussed in the French medical press is the subject of a striking, though hardly convincing, article by M. P. Carnot in Paris Medical of April 17. After pointing out that in 20 years' time the French race will be swept out of existence if French women do not make what he calls a superhuman effort of maternity, M. Carnot very frankly states the actual conditions and their possible remedy. These conditions, already sufficiently serious in 1914, have been naturally much aggravated by the result of the war in depriving the two million unmarried women now in France, capable of bearing children, of the chance of finding husbands.

To take the place of the men who were killed in the war there are two obvious alternatives: (1) To marry French women to foreigners, a solution that seems to M. Carnot very dubious and one that has had so far no encouragement from the authorities, although it is the only way in which it is possible to secure legal husbands for all French women. (2) To permit polygamy during a certain period—a solution that no one wants and which would probably be useless as a check on depopulation since the high cost of living makes it difficult enough for a man to support one woman, and French families, as well as those of other nations, have for a long time been practicing "birth control" on that account.

Before suggesting a third solution, M. Carnot quotes some Danish statistics to prove that in Europe there are now 13,000,000 more women than men, a figure that he believes shows the necessity for the legal recognition of some sort of matriarchal family, composed only of mother and children, of which he reminds his readers that many civilizations have given examples. This matriarchal family would be possible only if it were state supported, and, basing his argument on the fact that the supreme law of a race is not to perish, M. Carnot strengthens his defense by the axiom that in a

well-organized society maternity ought to be a woman's career, since, socially speaking, every woman ought to become a mother.

This career for women has never been properly organized, but, he says, it should be both honored and recompensed by the state The day when maternity is made a remunerative career many women will have children who now hesitate before the expense of bringing them up and the uncertainty of the future. Finally, M. Carnot believes that if it were not for the opposition of public opinion many women would be glad to satisfy their maternal instinct and become the mothers of children who would be their companions in old age. If this be true, the question is largly one of public opinion and economics. Before asking a woman to bear children her future and theirs must be assured by the state. To provide the funds M. Carnot suggested that bachelors and maids who have not fulfilled their social duties to the state should be obliged to leave their money to support the children of those who have.

CANAL ZONE MORTALITY.

The civilian population of the Canal Zone, based on the police census, taken as of June 20-30, 1918, is 21,707. From this population, 41 deaths occurred during the three months' period ending March 31, 1919, 38 of which were from disease, giving a rate of 7 from disease alone, as compared with a rate of 8.12 for the preceding three months and 10.98 for the corresponding three months of last year.

Of the deaths from disease, 45 per cent occurred among children under five years of age, as compared with 34 per cent for the preceding three months.

One hundred and forty-one births were reported for the three months' period ending March 31, 1919, giving a birth rate of 26. Of these births 53 were white and 88 colored.

Eleven deaths occurred among children under 1 year of age, all colored, giving an infant mortality rate, based on the number of births reported, of 125 for colored children, with a general average of 78.02 for 1000 births.

Of the total births reported, 7 per cent were still births.

The population of the City of Panama, as shown by the health department census of June, 1917, is 61,369; in this population is included approximately 8000 employees of The Panama Canal. From this population 278 deaths occurred during the three months' period ending March 31, 1919, 266 of which from disease, giving a rate of 17.32 from disease alone, as compared with a rate of 21.36 for the preceding three months and 18.51 for the corresponding period of three months of last year.

Of the total deaths from disease, 38 per cent occurred among children under 5 years of age, as compared with 44 per cent for the preceding three months.

COLON.

The population of Colon, as shown by the health department census of June, 1917, is 26,078; in this population is included approximately 7000 employees of The Panama Canal. From this population, 127 deaths occurred during the three months' period ending March 31, 1919, 117 of which were from disease, giving a rate of 17.96 from disease alone, as compared with a rate of 22.36 for the preceding three months, and 18.71 for the corresponding three months of last year.

Of the total deaths from disease, 32 per cent occurred among children under 5 years of age, the same percentage as for the preceding three months.

The causes of death in the above named were tuberculosis, pneumonia, diarrhoea and enterites, nephritis and organic heart disease.

H. C. L. IN 18TH CENTURY.

Medical men and their helpmeets should not worry too much about high prices. History repeats itself and ere long prices will get on the toboggan and speedily reach sea level.

To learn what our ancestors in the Revolutionary War period had to pay for life's necessities, we may turn to the letters that Abigail Adams wrote to her husband, John Adams, who, after the war, became Vice-President and then President of the United States, says the Newark News.

Writing from the town of Braintree, in Massachusetts, in April of 1777, Mrs. Adams remarked:

"There is a general cry against the merchants, against monopolizers, etc., who, 'tis said, have created a partial scarcity. That a scarcity prevails of every article, not only of luxury, but even the necessaries of life, is a certain fact. Everything bears an exorbitant price. The act, which has in some measure regarded and stemmed the torrent of oppression, is now no more heeded than if it had never been made. Indian corn at 5s; rye, 11s and 12s; but scarcely any to be had even at that price; beef, 8d.; veal, 6d.; and none; pork, none; mean sugar, £4 per 100; molasses, none; cotton wool, none; New England rum, 8s. per gallon; coffee, 2s. 6d. per pound; chocolate, 3."

Worse times came, however, for in June of 1779 she wrote as follows: "Labor is at $8 per day, and in three weeks it will be at $12, it is probable, or it will be more stable than anything else. Goods of all kinds are at such a price that I hardly dare mention it. Linens are sold at $20 per yard; the most ordinary sort of calicos at $30 and $40; broadcloths at £40 per yard; West Virginia goods full as high; molasses at $20 per gallon; sugar, $4 per pound; Bohea tea at $40, and our own produce in proportion; butcher's meat at 6s. and 8s. per pound; board at $50 and $60 per week; rates high."

EDITORIAL NOTES

Dr. Roy Fallas has taken offices in the Brockman Building.

Dr. L. A. J. La Motte has taken offices in the Baker-Detweiler Building.

The hundredth anniversary of the birth of Florence Nightingale was celebrated May 12th.

Dr. Howard F. West, formerly of Boston, has taken offices in the Brockman Building, Los Angeles.

Five physicians were signers of the Declaration of Independence. We will not ask you for their names.

THE MEDICAL RECORD, which is usually ideally sane is shedding editorial tears because the prohibition law permits "A sick person who may need alcohol to save his life, to have only one pint of whiskey in ten days! O My! O My!!

Dr. Walter Klotz, formerly of the Barlow Sanatorium, Los Angeles, is now superintendent of the Blue Ridge Sanitarium, a new state institution for the tuberculous at Charlottesville, Virginia.

Dr. Wilbur Beckett, who recently returned from New York, where he took a post-graduate course, has been admitted to the Los Angeles County Medical Society. The profession welcomes him and wishes him success.

Dr. Dodge died on January 17, 1919, following an alleged attempt at self-destruction several days before. He was a survivor of the liner Titanic and was president of the Federal Company from December 4, 1917, until his death.

The Journal of the A. M. A. of recent date says: Dr. Adolph Zederbaum, member of the American Medical Association, graduate University of

Berlin, Germany, 1883; University of Dorpat, Russia, 1887; aged 71; died on the operating table, Methodist Hospital, Los Angeles, May first.

Smallpox is still prevalent in California. Sixty-one new cases were reported by the State Board of Health for the week ending May 22. Every physician should urge on his patients day by day the importance of vaccination. What did you do in this line yesterday?

Hydrocephalic epilepsy with report of case, is the title of a remarkably interesting reprint received from Dr. Cecil E. Reynolds. By the way, Dr. and Mrs. Reynods have returned to Los Angeles from a 6 months' bridal tour that included three months in London. The doctor has taken offices at 618 Title Insurance Building—telephone 65821—where he will meet referred patients on Mondays, Wednesdays and Fridays.

When Thomas De Quincy wrote the "Confessions of An Opium Eater," in 1822, the opium habit was of more than ten years' standing. He made several efforts to conquer it, and at one time reduced the 340 grains which he took daily to 40 grains. An attachment formed at Grasmere to a Miss Margaret Simpson was the motive for his reform. The habit soon mastered him again, and he became the victim of curious dreams, one of w was that he thought himself haunted by a tremendous crocodile, and a certain Malay long continued to torment him.

Wanted—First-class location in California. Partnership, association with group or an industrial or hospital position. Am 35 years old, married, one child, excellent health. Have had ten years' active general and surgical practice, including two years' extensive orthopedic service in the army. Have a clean record and have made good. For family reasons wish permanent location in at least medium sized city with good hospital facilities. Moderate investment only. Proposition must be bona-fide. Protestant, Mason, Shriner, etc. Best of business and professional references. At present north, but can look into a good opening on short notice. Address 3438, care this journal.—(Advertisement.)

The Los Angeles County Medical Association elected the following additional members at a recent meeting: Louis N. Anderson, M. D., Inglewood; Chas. A. Bailey, M. D., 3046 Guirado St.; Wilbur A. Beckett, M. D., 2218 Harvard blvd.; Paul A. Ferrier, M. D., 607 Citizens Sav. Bk., Pasadena; G. W. Forester, M. D., Pomona; Burdett S. Frary, M. D., 5301 Monte Vista St.; A. B. Montgomery, M. D., 435 Cedar Ave., Long Beach; M. M. Morrison, M. D., 818 Investment Bldg.; Rudolf F. Rohlfing, M. D., San Dimas; B. C. Ryder, M. D., 407 Black Bldg.; W. C. Smallwood, M. D., 10 Moody Bldg., Long Beach; Herbert E. Tebbetts, M. D., Whittier; Robert W. Wilcox, M. D., 10 Moody Bldg., Long Beach.

Older members of the profession in California will recall the stalwart form of Dr. Washington Dodge of San Francisco, a graduate of the University of California, 1884. After achieving success as a practitioner and supposed to have accumulated wealth, the state was startled by hearing of his death, apparently from suicide.

SAN FRANCISCO, May 21.—Suit to recover $480,000 from the estate of Dr. Washington Dodge, former San Francisco assessor and banker, on the allegation that he headed a conspiracy to defraud the Federal Telegraph Company out of that amount, was filed by R. P. Schwerin, president of the company here.

"Methodist Hospital of Southern California, Los Angeles, Cal., May 1, 1920. The following rates will become effective May 1, 1920: Ward service, $3.50 per day; solarium service, $4.00 per day; rooms, $5.00 to $12.00 per day; suites, $18.00 per day; operating room fees, $5.00 to $17.50; birth room fees (delivery room,) $8.00; nursery, $1.50 per day, including all clothing and laundry for babe; special nurse's board, $1.50 per day.

"These rates will include board, room service, general nursing, care urinalysis and all ordinary drugs and dressings, but a charge will be made for oxygen, vaccines, serums, liquors, special prescriptions or dressings and articles of food not on the hospital dietary.

"The fees for X-ray and laboratory service will conform to the usual charges."

The anti-vivisectionists are very busy issuing their propaganda. Among others quoted in their literature is the following by George Starr White, M.D., Ph.D., LL.D., F.S., S.C. Lond., 327 South Alvarado Street, Los Angeles, California.

GEORGE STARR WHITE, M.D., Los Angeles, Calif.

"Some years ago, while visiting one of the largest laboratories in New York City where vivisection is carried on, I saw enough to make any humane person shrink and hide his face in shame. I called the attention of the director to the torturing that was going on by various doctors present, and I was then and there held up to ridicule. Dogs were strapped to their stretchers and opened up without any anaesthetics whatsoever; the young doctors stood around and jeered at the agony and useless struggling of the dogs. I do think that if honest physicians and the public in general knew how ruthlessly animals are tortured in these institutions, **they would rise in holy horror and crush out "camouflaged Prussianism" in the guise of vivisection.**

BOOK REVIEWS

CUNNINGHAM'S MANUAL OF PRACTICAL ANATOMY. Revised and edited by Arthur Robinson, Professor of Anatomy in the University of Edinburgh. Seventh Edition, Volume First, Superior Extremity; Inferior Extremity, with 203 Illustrations, many of which are colored. New York: William Wood and Co., Edinburgh, Glasgow, and London. Henry Frowde and Hodder & Stoughton, 1919.

In this edition the general text has been revised, and many new figures, representing dissections, sections, and radiographs, have been introduced. The instructions for dissection have been printed in a distinctive indented type; in many cases they have been rewritten and in some cases amplified.

The latter changes, together with the additional figures, have caused an increase of size, and the division of the manual into three volumes. Vol I.: Superior Extremity and Inferior Extremity; Vol. II.; Thorax and Abdomen; Vol. III: Head and Neck.

There is no better and handier manual of anatomy in English. The liberal use of reproductions of radiographs is helpful in many ways.

MANUAL OF SURGERY. For Students and Practitioners. Tenth Edition. By Albert Carless, C.B.E., M.B., M.S., Lond., F.R.C.S. Colonel (Temp), A.M.S.; Consulting Surgeon, Eastern Command; Emeritus Professor of Surgery to Kings College, London, and Consulting Surgeon to King's College Hospital; formerly Examiner in Surgery to the Universities of London, Glasgow, Manchester, Liverpool and Leeds, and to the R.A.M.C.; Medical Director, Barnardo Homes, etc. New York; William Wood and Co. Price $8.00.

In three chief directions has new and valuable work been done, during the past five years that have intervened since the last edition, viz., in the treatment of infected wounds, in dealing with compound fractures, especially of the

shafts of long bones, and in making good the defects of war wounds. In the sections devoted to these subjects a considerable expansion has been necessitated. Many new illustrations have been added, and an effort thus made to lighten the labor of the reader. X-Ray plates have been gathered into special sheets so as to enable them to be printed on art paper, thus avoiding the blurring and loss of detail inevitable when they are included in the letter press of a wartime edition. This arrangement is especially useful to those interested in X-Ray diagnosis, and in future editions we hope to see an improvement in this feature. In general, this edition of the Rose and the Corless Manual is remarkably good. It maintains its position as a standard surgery, and presents a reliable guide to the adaptation of war experiences to the exigencies of civil practice.

STANDARD NOMENCLATURE, of Diseases and Pathological Conditions, Injuries and Poisonings, for the United States. First Edition. Washington Government Printing Office. 1920.

The Council of National Defense began the Standard Nomenclature of Diseases, Pathological Conditions, Injuries and Poisonings, for the United States, but was unable to complete the work because of other problems. The Council therefore recommended that the nomenclature be completed by the Bureau of Census. This recommendation was indorsed by the Surgeons General of the Army, Navy, and Public Health Service, and the President of the United States allotted the necessary funds. The nomenclature here submitted is an attempted consolidation of eight nomenclatures, namely: (1) The Bellevue Hospital Nomenclature of Diseases and Conditions; (2) Nomenclature of Diseases and Conditions, United States Public Health Service; (3) Coding Book for Diseases and Traumatisms, Medical Department, United States Army; (4) Nomenclature of Diseases and Injuries, Medical Department, United States Navy; (5) Nomenclature of Diseases and Affections, American Expeditionary Forces; (6) Classification of Diseases, Massachusetts General Hospital; (7) List of Diseases and Pathological Conditions, Stanford University Medical Department, including Lane Hospital; and (8) the Nomenclature of Diseases, Royal College of Physicians of London. To the terms taken from these nomenclature have been added terms from standard works on medicine and surgery, the Johns Hopkins Hospital Reports Monographs, New Series No. IV, and such medical dictionaries as, Stedman, and Dorland. When authorities differ as to proper spelling of terms and as to preferred terms, Gould has been followed for the most part.

It seems to us questionable whether this attempt will really cut the Gordon knot or only add to the mystifying multiplicity of nomenclatures. However, it may possibly simplify matters somewhat by supplanting the nomenclatures above numbered two, three and four.

SOUTHERN CALIFORNIA PRACTITIONER.

Vol. XXXV. LOS ANGELES, JULY, 1920 No. 7

FREQUENT MISTAKES MADE DURING THIRD STAGE OF LABOR*

By D. A. THEIME, M. D., LOS ANGELES.

More women die during the third stage of labor than in the first and second combined. Hence the importance of the proper conduct of this stage, for although the improper conduct may not always cause death, it will cause grave complications, such as Post Partum hemorrhage, infection from retained pieces of placenta and membranes, or it may leave the patient an invalid for the rest of her life.

It seems strange that the third stage, which in a normal case, should be comparatively easy, causes so many complications, pathology and poor after-results. If one should ask what is the causative factor for all this, the first answer would be, haste. It seems that some men, many of them, do good and excellent work during the second stage, but at the third stage they get in a hurry, forget all they ever knew of the merchanism of expulsion of the placenta; they forget the grave danger to the patient, but only seem to think about getting through and going home. They will do everything and anything to deliver the placenta, and instead of gaining time, they lose time, and risk the life of their patient.

Some weeks ago I saw a striking example of what haste will do, or rather what it will not do. At a hospital, a patient of another surgeon was in labor, at the end of the second stage. I was waiting for one of my own cases. The nurse was unable to get the patient's doctor and asked me to deliver his patient. I delivered her through the second stage, with the babe in good condition. At the beginning of the third stage the doctor came and I turned the case over to him. About five minutes after the baby was born, the uterus was massaged vigorously. There was no hemorrhage. A few minutes afterwards an early expression was attempted. (The doctor said he always did that.) After trying that two or three times, a crede (improperly done) was tried with no results. Then a consultant came in (I was simply watching). While he was cleaning up, there was some more massage, and credes, (improperly done)—The traction on the cord by one, with massage and crede

*Read before the Los Angeles Obstetrical Society, January 13, 1920.

by the other! Afterwards the nurse told me that they kept at the placenta for three hours. Severe hemorrhage followed, with infection after that. The placenta was finally removed by a third man. Probably that patient would have delivered the placenta spontaneously if she had been left alone. Remember that the average time for a placenta to be delivered is from 15 to 45 minutes, not from 2 to 5 minutes, after the delivery of the child.

The most important function of the obstetrician during the third stage is to save blood. This saving of blood aids in rapid recovery, lessens the chance for infection, and leaves the mothers in better condition to nurse their babies. Excessive hemorrhage is produced by improper conduct of the third stage. The rough massage, without an indication, like that described above, mashes the placenta and over excites the uterus. The same is true of an improperly performed crede.

Another frequent mistake made is the premature attempt at expulsion of the placenta. Some men will attempt an early expression, or a crede, for no particular reason, a few minutes after the birth of the babe. The results may be hemorrhage, severe pains to the mother, over stimulated uterus, then enertia uteri. Neither of these two methods should be used, unless some special occasion arises, until at least 4 minutes after the birth of the babe. Early expression if done at the proper time, with a definite indication, is a valuable procedure. Frequently early expression is done entirely wrong, by pressing the uterus forward against the pubis. Do not attempt too many early expressions. If it does not succeed the first time and there is no severe hemorrhage, then you had better wait for five or eight hours.

The neglect to empty an over distended bladder is a frequent cause of a prolonged third stage.

During the third stage care as to asepsis should be redoubled. An immense amount of harm has been done by frequent examinations "to see where the placenta is." In a normal case the introduction of the fingers in the vagina should be absolutely avoided, we can readily see the great chance for infection of a vagina covered with abrasions. If it is poor technique for vaginal examinations during the first stage, surely then during the third stage, it is more dangerous.

Pulling on the cord to deliver the placenta while the placenta is still in the uterus, should be severely condemned. The chief danger is inversion of uterus. Some say that this is impossible, but I have seen it done. The cord may be torn, also the membranes. I know one man in this city, who wraps the cord twice around his hand, and then pulls. He has never told me of his angler results.

Sometimes the careful examination of membranes and placenta is forgotten. This examination is extremely important. Personally I always examine them in the presence of a nurse. It may lessen complications later in more than one way. If we find that a large piece of placenta or membrane has been retained it is probably best to remove it, under the strictest aseptic precautions. But if not certain or if only a small piece of either has been retained, by all means adopt the expectant plan of treatment.

Don't neglect lacerations. Lacerations of the perineum and vagina should be repaired if possible, before the expulsion of the placenta, that is while we are waiting for it to be expelled. If this cannot be done, then after its expulsion. If the lacerations are very extensive, we can do a repair, two or three days after labor. This sometimes gives better results.

Many lacerations are overlooked, or neglected (not repaired) because it takes extra time. One man told me he

never had any lacerations in his obstetric practice. I wonder if he ever looked for any. Ergot is frequently given at the wrong time, before expulsion of the placenta. The result often is a retained placenta. Ergot contracts the lower uterine zone mostly, and hence if given early retains the placenta, instead of aiding its expulsion. Never give Ergot until the uterus is empty. At that time it may do good, at least it does no harm.

INDICATIONS FOR AND TECHNIC OF ABDOMINAL CESAREAN SECTION.*

BY THOS. O. BURGER, M.D., SAN DIEGO, CALIF.

There are certain conditions in pregnant women where Cesarean section is absolutely demanded, as in contracted pelvis, tumors, or positive disproportion. Then there are many other cases where it is a question of no small moment to decide, and of these I will take up the larger number.

There may be a tumor of the uterus or ovary that is of questionable interference with normal delivery, and while Cesarean section may not be especially indicated, the opportunity for taking care of the tumor at the same time might be the determining factor in decision for section. Certain constitutional diseases, as tuberculosis or degenerative conditions may make this manner of delivery most safe and desirable. Davis, in a recent paper on elective Cesarean section, describes some such cases when lack of uterine energy, not the usual inertia, but a muscle condition with no initiative to start labor, is a good reason for Cesarean.

Women who have had one or more sections before may be delivered per vaginum; though there are many reported ruptures of scars, and that is enough to make section in this instance a discussed problem. Of course if she had had other children normally and easily before the Cesarean, and especially since section, it may be taken for granted that the one under consideration will be O. K. unless some definite new abnormality exists.

Primipara, about the menopause, when a difficult labor may be expected, and when a live baby (as is often the case at this age) means more to the couple than to younger parents, may elect this as the surest for the baby and very little if any more risk to the mother.

A bad obstetric history of very difficult delivery with loss of babies in delivery, severe tears, etc., may be a justifiable demand for Cesarean. Also a bad obstetric history when a good supply of babies exists it may seem justifiable to do section and sterilization to stop further pregnancies.

There may be some previous operative or abnormal condition in the way of ventral suspension or a cervical abnormality, which will also make this a justifiable procedure.

The above indications are not emergency ones, and may in most cases be considered long and be weighed from different angles. The age of patient, other living children, the desire for children, may be the determining factors. The future health, that is, which leaves the mother most permanent morbidity, the damage to region of parturient canal, or the damage by section in the way of adhesions, etc., is a necessary decision to be made in many cases when childbirth approaches.

Occasionally, in certain types of neurotic women whereof the prolonged suffering, fatigue, etc., of a long, difficult labor is so much more than that of a

*Read before the San Diego County Medical Society, Feb. 24, 1920.

short anesthetic and a three-day soreness of the abdomen, that we may decide on those grounds that section is much to be preferred.

Twins definitely diagnosed and locked in effort at delivery may make Cesarean the necessarily safe method of delivery. Failure to engage in otherwise normal conditions offers by big odds a better chance for baby and equal for mother by hysterotomy.

The two principal obstetric emergencies calling for a decision are placenta previa-hemorrhage and eclampsia. In hemorrhage from placenta previa with much or little blood loss is to be figured from many angles. If a centralis, in first labor, parents very anxious for live baby, patient in or near hospital, section offers practically 100% live babies. Bags or forcible delivery by podalic version certainly cannot offer 50% of live babies. Cesarean offers about as many live women in this situation as does any other method. Therefore operation is clearly the method. Then the different degrees of implantation, the fact of previous babies, and the less danger to mother of death from hemorrhage, probability of easier extraction of baby makes Cesarean less desirable than the usual podalic version or bags. Therefore in this condition it is a matter of enumeration of all these factors, the degree of desire for a live baby and all the circumstances, and then the decision as to which method to pursue. In some the demand for section is plain and urgent, in others it is a question, and in still other placenta previas vaginal delivery is the method par excellence.

In podalic version delivery the fetal mortality in figures is anything you want to say, as you may find someone's statistics to bear you out; and again I say it depends on so many factors that figures should not be counted, but judgment used.

DeLee recently says of placenta previa, "Cesarean section is gradually gaining reluctant recognition, and recently the operation has begun to enjoy more, and I think just, popularity. Placenta previa under usual methods shows at best 4% maternal mortality, and its treatment entails great anxiety, much loss of time, and exceptional obstetric skill to save mother and child. Indications for Cesarean section will arise in centralis and partial placenta previa at or near term with living child, mother in good condition, the cervix closed and promising a difficult dilatation, conditions not uncommon in primipara."

Eclampsia is the honor of most obstetricians. When is there very little question but that Cesarean is the choice: I would answer, if child is viable, no dilatation or engagement, primipara especially if repeated convulsions in short succession, an early Cesarean will give baby best chance by long odds; and with most rapid emptying of woman of cause of her toxemia and opportunity to let her bleed freely, if desired, is equally as safe for mother as sedative expectancy. And waiting expectancy in this situation is not easily endured by either accoucher or woman's family, though some strong supporters for morphin or sedative treatment believe it offers equally good results. Rapid vaginal delivery is hazardous to baby and I feel more often mutilating and dangerous to mother, and takes much longer than Cesarean.

Four cases in my work since the first of 1920 are illustrative of some of the propositions I have been considering.

Case 1. A very lethargic woman referred by Dr. Z., who had shown undue lack of activity for last few months, had gone apparently three weeks beyond a good count. Had had hazardous deliveries before this one. All starts at labor failed as did all efforts and usual stimulants. Was finally operated and uteri muscle found flabby and pale, and a large well developed baby. This

one similar to cases mentioned in Davis' paper. Sterilization and operation finished in thirty-two minutes, smooth recovery.

Case 2. Patient of Dr. J. rushed into hospital on account of free bleeding; carefully examined by doctor; diagnosed placenta previa centralis second pregnancy. Situation explained to husband as to wife's danger, relative safety of baby being certain in Cesarean, fifty-fifty if by version. We decided on section, and in eleven minutes after starting operation placenta removed showing it to be as exact a central implantation as could be possible. Operation over in twenty-one minutes and patient's pulse reported by doctor as 125 against 136 when beginning. Pulse continued rapid and she also showed after three days distended stomach which lavage promptly controlled and also reduced pulse rate. Recovery O. K.

Case 3. Referred by Dr. Z. Parra four, had four or five convulsions when arrived at hospital, no dilatation, no fetal sound or evidence of viability. Patient semiconscious, and another convulsion ensuing we decided to rapidly deliver by dilatation and version, which required over two hours by alternate efforts of two of us, and then delivery of dead baby, with very deep cervical and vulval tears. Bleeding excessive till suturing controlled it. Mother had a very stormy, septic recovery. I believe it would have been better for her to have had Cesarean section, and I would so have advised if the child had been viable, or I had seen her earlier. Her first convulsion was nine hours before her arrival at the hospital.

Case 4. An unusual one. Para 3; other two babies had to be forcibly delivered; and the woman had the most distinct muscular atonia her physician or I had ever observed. She had been unable to exercise for weeks. Her physician felt that Cesarean section would give the baby the best chance, as well as the mother. This was done and recovery was without incident to either.

I feel that I may justly be proud of my good luck in getting my cases, which do not yet run into numbers sufficient to make statistics, but I have never had a Cesarean where both mother and baby have not lived.

My technic of the simple abdominal transperitoneal section is briefly as follows: An incision four and one-half inches long, high up, going just to the left of the umbilicus with it near or above the center. Protecting as in all abdominal surgery the skin by clipping towels or gauze well to edges of incision. (As abdomen is opened 1 c.c. pituitrin is injected in a convenient place). Straighten uterus if rotated. Pack around it with large saline sponges. Start incision in uterus and work in with back of scalpel so that fetus may not be injured. Amniotic fluids may be caught in sterile basin if desired or with pads. Then with scissors open uterine wall three and one-half to four inches, and grasp leg and extract child, lay on sterile blanket, clamp cord and cut. See that a dependable person attends child. As child is out have assistant with both hands grasp uterus and compress, palms hugging fundus, thumb and fingers pressing broad ligament, and also now pack more large pads around rapidly decreasing uterus. Hand in uterus dilate cervix if necessary and then thoroughly remove all placenta and membrane, and may wipe out uterine cavity with sponge. If case has had membranes break or numerous questionable examinations, the glove or sponge used to remove placenta and membrane should be carefully brought out and discarded so as not to soil peritoneum. This care and extra abdominal pads protecting peritoneum and uterus and abdominal walls is almost as safe as extra peritoneal section. Uterus closed with three layers, the last somewhat of a Lembert bringing peritoneal surfaces together, making best closure and least oppor-

tunity for adhesions. If a free omentum place it over suture line; be sure everything is out of abdomen, blood clots, fluid or sponges, as this kind of an abdomen is especially good to lose things in. Close abdominal wall by layer and snugly bandage and bind.

Quoting Bar: "Practiced in appropriate surroundings, by experienced operators, according to the very simple technic which experience has shown to be the best, and patients not menaced with infection, Cesarean section appears to be an operation giving almost certain success for the mother and it need hardly be said for the child."

Summary: Indications for Cesarean section may be very positive, though in many instances it requires that rare and most valuable of professional accomplishments, viz., JUDGMENT.

Maternal mortality and morbidity are reduced to a minimum by hysterotomy, using highly developed technic.

Selected Cesarean contributes to infant conservation.

Have never done Cesarean where patient, her physician or myself have regretted that method of delivery.

1200 First National Bank Building.

New York, July 9, 1920.

To the Editor of the Southern California Practitioner,
Los Angeles, Cal.

My dear Doctor:

In your esteemed issue of June I read the letter from Dr. Geo. Starr White in reference to vivisection. Among other things he says:

"Some years ago, while visiting one of the largest laboratories in New York City, where vivisection is carried on, I saw enough to make any humane person shrink and hide his face in shame . . . . . Dogs were strapped to their stretchers and opened up without any anaesthetics whatsoever; the young doctors stood around and jeered at the agony and useless struggling of the dogs. I do think that if honest physicians and the public in general knew how ruthlessly animals are tortured in these institutions they would rise in holy horror and crush out 'camouflaged Prussianism' in the guise of vivisection."

I herewith ask Dr. White to give me the name of that large laboratory and the name of the director who held Dr. White up to ridicule because of his protests. As an old-time resident of Los Angeles, and having begun my medical career in that beautiful city, I have still a warm spot for it in my heart and would wish to see only believable stories printed in its leading medical journal. I have lived now nearly 25 years in New York City, been connected with many of the leading medical institutions, and am familiar with all the great laboratories and their practices. I cannot conceive that such things as Dr. White describes could have happened in any one of them. I know that in none of them, from the Rockefeller Institution down to the smallest private laboratory, are such cruelties as Dr. White describes practiced. I am willing to declare that the conditions are, to say the least, grossly exaggerated and strangely misrepresented by Dr. White's statements. Nevertheless, if he will give me the name of the laboratory I will investigate the matter and promise the readers of the Southern California Practitioner and Dr. White an exact report, and I will apologize to him for my doubts as to his veracity if half of what he says can be substantiated. Nearly all our progress in surgery and medicine is the result of experimental medicine, and to mention only one of the achievements, our diphtheria mortality today would be 75 to 80 instead of 5 per cent without the animal experimentation which led to prophylactic and curative anti-diphtheritic sera. I should like to have Dr. White answer me another question. If he is a father or a lover of little children, would he rather have 75 out of every hundred die of diphtheria than permit scientific animal experimentation and even vivisection?

Very truly yours,
(Signed) S. A. KNOPF.

SOUTHERN CALIFORNIA PRACTITIONER.

A MEDICAL, CLIMATOLOGICAL AND SOCIOLOGICAL MONTHLY MAGAZINE.

This journal endeavors to mirror the progress of the profession of California and Arizona.

Established in 1886 by Walter Lindley, M.D., LL.D.
DR. GEORGE E. MALSBARY, Editor and Publisher.

Address all communications and manuscripts to
EDITOR SOUTHERN CALIFORNIA PRACTITIONER,
Suubscription Price, per annum, $1.00. 1414 South Hope Street, Los Angeles, Cal.

EDITORIAL

PELLAGRA—ETIOLOGY OF

The increasing number of cases of pellagra in California makes the following extracts from a recent editorial in the Journal of the A. M. A. of great interest:

The etiology of pellagra has attracted the consideration of a number of investigators who have been able to study it on an unusually large scale and with exceptional facilities. In this country the zeist theory, which related pellagra in some way to the dietary use of maize and maize products, has been finally abandoned. An exclusive diet of corn is unquestionably inadequate; and corn damaged by microbiotic changes may well be harmful at times to persons ingesting it. But no adequate review of the actual incidence of pellagra, as it has occurred in different places and among different peoples, will any longer justify the assumption that the pathogenesis of the disease is concerned primarily with a corn factor. Pellagra may occur without the use of corn.

As stated in Public Health Reports, the somewhat lower plane of supply, both of potential energy and of protein, in the diets of the pellagrus households, though apparently not an essential factor, may, nevertheless, be contributory by favoring the occurrence of a deficiency in intake of some one or more of the essential dietary factors, particularly with diets having only a narrow margin of safety.

Further research is almost certain to discover more specifically the precise shortcomings in the food supply which are responsible for pellagrous symptoms. In the affected regions of the South, however, it seems clear that an increase in the availability of milk—perhaps by increasing cow ownership, as Goldberger and his colleagues propose—and of fresh meat by all-year-round meat markets at present represents the important practical measure to prevent and control pellagra.

DR. NORMAN BRIDGE—THE NURSING PROBLEM

Dr. Norman Bridge delivered the commencement address of the Medical Department of the University of Chicago, June 16th. The title was "Look-

ing Ahead,'' and the address contained, as we would expect, much that is of practical value.

The speaker dwelt on the great expense that is now incurred in going as a patient to a hospital; he urged that hospitals should be provided where patients of small income could be cared for at a rate of $1.00 per day.

The next condition requisite is less expensive nursing. These patients cannot afford over $2.00 a day in ordinary times. Registered nurses cannot work for that. This fact, and the need for less expensive nurses, reveals to us one of the hardships that have grown out of our commendable profession of nursing. We have insisted on such severe conditions for admission to our better training schools, and on so long a course of instruction, that we have created a nursing system that is too costly. It is necessary to have nurses who can work for half the wages that a registered nurse gets. The best remedy is a new one, which is to have young women with some grammar school education who can be drilled intensively for a few months on the simple, cardinal things that all nurses must do. Any bright girl can be taught in sixty days to take temperatures, pulse and respiration accurately, to prepare and administer invalid diet, to administer drugs in numerous ways, to give baths and fomentations, and attend to the personal wants of the invalid, and to keep accurate records of the patient, and of her own doings. For the average invalid these are the chief things required of a nurse. Of course, in critical cases a fully trained nurse would be necessary; also in most surgical cases, but not all; and where two or three nurses were required, one trained nurse and two assistants under her direction would usually be all sufficient.

What these young nurses should be called is a matter of taste. Cadets or nurses' assistants would do.

This plan does not disparage the dignity or calling of the registered nurse. Her standing would rather be enhanced if she had among her other attainments the ability to manage and teach cadet nurses under her.

There is now a demand in many quarters for more nurses. This plan would provide more nures; and the good offices of the present registered nurses, and a little more patience on the part of the doctors, would make it certain that nursing as a whole would not be lowered in standard, but rather improved, when we consider that many patients would have nurses with some training who now are nursed solely by inefficient lay friends.

As to the training schools for nurses, it is a serious question whether their curriculum should not be changed. For example, the students are taught from books the anatomy and physiology of the human body. Most of that could be left out without harm. With that omitted and more time given to laboratory work, in examinations of the secretions, excretions and tissues of the body, chemically and microscopically; and if the nurses were taught more of the social and public health usefulness in store for them, we would probably improve the output.

And it is a serious question, now being agitated, whether the three-year course for a woman who has already had some academic training is not six months or a year longer than is necessary. Dr. Philip King Brown, of San Francisco, a broad minded physician and a wise observer of this subject, says: ''There is nothing in the training of nurses for the work that most of them do that warrants three years spent in getting that training.''

C. D. Ballard, Esq., was recently appointed assistant counsel for the State Board of Medical Examiners. His offices are in the Wright and Callender Building.

EDITORIAL NOTES

Dr. John C. Irwin has taken offices in the Los Angeles Investment Building.

Dr. Francis Potter Miller has offices on the eleventh floor of the Title Insurance Building.

Wm. W. Hutchinson, M. D., announces the removal of his office to 619 Brockman Building.

Dr. Elliott P. Smart has located in the Baker-Detwiler Building, 412 West 6th St., Los Angeles.

Dr. W. A. Weldon, the pioneer surgeon of San Pedro, has gone to Colorado Springs for his health.

Dr. Edgar K. Shumaker is now associated with Dr. H. Bert. Ellis and Dr. Geo. H. Kress in the Bradbury Building.

Dr. Francis Emmett Browne will be one of the internes in the California Hospital for the year beginning August first.

Dr. Murial D. Cass, formerly physician of the Los Angeles Juvenile Hall, has resigned and gone to join her husband, Lieut. Phil. Cass, at Camp Stanley, Texas.

Dr. Harold E. Morrison, formerly of Pasadena, has removed to Banning, where he will devote himself to conducting the Seymour Sanatorium for diseases of the throat and lungs.

Dr. George H. Scott, age 91, died at his home in Long Beach on May 9th. He was a native of Scotland and a graduate of the Jefferson Medical College and was held in high regard by all who knew him.

Mrs. James L. Paul has, in memory of her late husband, Col. James L. Paul, agreed to give $75,000 to the city of Ontario, Cal., for a hospital. Dr. Wm. H. Craig of Upland is the president of the association.

Dr. N. S. Bevins, who is a graduate of the Iowa State University and held for one year an internship in the Wesley Hospital in Chicago, and has since served two years in the army, has located in Long Beach.

Dr. John N. Osburn, well known as an oculist and aurist, has retired from service in the U. S. Navy and taken offices at 1920 South Figueroa street. Dr. Osburn is a welcome addition to the profession of Los Angeles.

The Phi Rho Sigma Medical Greek Letter Society of Los Angeles recently gave a luncheon at the University Club in honor of Dr. Wilbur Beckett, who has spent the last six months taking a post-graduate course in New York.

The election of Dr. William Duffield of Los Angeles, as Vice-President of the State Medical Society, is an honor worthily bestowed. Dr. Duffield is an able, energetic and altruistic member of the profession.

Under Incorporation the daily papers have the following:

University Hospital Medical College and Clinic, incorporators, Dr. Charles W. Bryson, Dr. Rayel B. Jenkins, Dr. Edmund W. Littlefield, Thomas C. Peck, Harmon D. Ryus; capital stock, $1,000,000; subscribed, $33,000.

Long Beach proposes to have an eight-story, thoroughly modern building, equipped exclusively for offices for the medical and dental profession. We believe it was once proposed to have such a structure in Los Angeles.

The U. S. Public Health Service Hospital at Arrowhead opened on June 15th with 100 patients. Dr. John H. Meyer of San Bernardino and Dr. W. F. Moore of San Francisco are on the staff. The Government has great plans for the future of this much needed institution.

The physicians of San Bernardino and Riverside counties recently held a barbecue and meeting in the mountains at Glenn Ranch. There were over 200

present. Dr. Wm. Duffield, Vice-President of the State Medical Society, was a special guest of honor.

Dr. Hill Hastings, while on his way East, was stricken with pneumonia and taken from the train at Albuquerque. His friend, Dr. Donald J. Frick, and Mrs. Hastings went on to be with him. Dr. Hastings, we are happy to say, made a very prompt recovery.

Dr. D. M. Gandier, the well-known Prohibitionist manager, died recently at Loma Linda from cancer. It is a pity that he could not have lived to have read the decision of the Supreme Court in regard to the 18th amendment which he had done so much towards getting adopted.

Dr. O. M. Justice recently sued Alexander Pantages, the theatre man, for $12,500 for medical services. The case was tried and the jury awarded the Doctor $750, but it was stipulated that this amount was to apply on a note for $7,500, held by Mr. Pantages against Dr. Justice.

The Los Angeles Express says that more than one hundred physicians of Los Angeles are facing Federal indictment for violations of the prohibition enforcement regulations. Among them are some of the leading men of the profession in this city, and all are said to be of good professional standing.

The daily press has had pictures of Dr. Lyle McNeil and Dr. Olga McNeil, lately legally separated, who still continue to occupy the same offices and pursue their joint career as physicians. While their domestic life has been a failure, their professional partnership has not had a ripple of inharmony.

Dr. John W. Nevius, who has been in charge of the Los Angeles Municipal Narcotic Clinic, has resigned. Dr. Nevius says when he accepted the position he agreed to devote four hours a day to the work, "Instead, I am giving six to eight hours, and I can no longer afford it."

One hundred and twenty-five nurses engaged in public health work with city and county health departments, clinics, tuberculosis societies, social hygiene activities, Red Cross chapters and other welfare organizations have been granted certificates as public health nurses by the California State Board of Health.

The State of California clothes, houses, feeds and provides medical service to 15,000 insane, feeble minded, criminal and constitutionally inferior human beings. At least 15 per cent of the inmates of the state hospitals, in which most of these 15,000 wards are found, may trace their present condition to syphilis.

The Los Angeles Times of June 6th says: Proud of her part in shaping the future destiny of Serbia through her work among the children of that stricken country, Dr. Laura T. Myers, well-known Los Angeles woman physician, returned home last week after seven months' service overseas with the American Women's Hospitals.

Dr. Chas. C. Valle, age 70, a resident and practitioner in San Diego for the last 35 years, died at the St. Joseph Hospital on June 3rd. The funeral services were held at the St. Joseph's Church on June 7th. Dr. Valle was born in Frederick Town, Mo., June 10, 1850. He graduated from the St. Louis Medical College March 7, 1879.

WANTED—Position as X-ray technician by young woman aged 25. Am now in charge of X-ray laboratory in general hospital in middle west, and am thoroughly familiar with all branches of the work, including High Frequency treatments. References from prominent physicians. Address, 25, Care of Southern California Practitioner.

Pasadena has come to the front with an ordinance which requires the physical inspection and examination of all food handlers and provides for the exclusion of all persons having active

cases of tuberculosis, syphilis, gonorrhea and other communicable diseases from food producing and distributing plants within the city. New York City has enforced such an ordinance for many years, but Pasadena is the first city in California to enact a measure of this sort.

The death of Calvin Hartwell, who for many years had been the faithful and competent coroner of Los Angeles County, removes a stalwart figure. It is now proposed to eliminate the office of coroner and transfer its duties to some other official. Supervisor J. H. Bean says that $25,000 per annum can be saved and equal efficiency maintained.

At the recent meeting in Anaheim of the Orange County Medical Association, the following officers installed were: Dr. W. C. Dubois, president; Dr. J. H. Lang, vice-president; Dr. J. C. Crawford, secretary; Dr. R. A. Cushman, treasurer, and Dr. C. D. Ball, librarian. Doctors W. H. Wickett, C. C. Violett and John Wehrly were installed as the board of councillors.

Dr. J. L. Pomeroy of the Los Angeles County Health Office seems to constantly have his bludgeon out for the Japanese. His latest is that the increase in typhoid fever in Los Angeles County has been traced to the food supply and in many cases to the Japanese farmers who disregard the health laws of the state. Dr. Pomeroy has also discovered that the Japanese women are increasing the population faster than is desirable.

Dr. H. W. Fenner, Dean of the Medical Fraterniay of Tucson and President of the Tucson Chapter of the Red Cross, was recently the guest of honor at a dinner given by the Pima County Medical Association. It was in celebration of Dr. Fenner's 37th anniversary of his establishment as a physician in Tucson and it also celebrated his retirement from active practice. Dr. W. V. Whitmore, who next to Dr. Fenner, holds the place of the oldest practitioner in Tucson, was toastmaster.

The Los Angeles Express says that Dr. Reine Hartsel, house physician of the Maryland, Green and Huntington Hotels, was reported on his way to the Orient to escape arrest for alleged violation of the 18th amendment, by the removal of whiskey from bond for illegal purposes. The Express further says that Dr. Hartsel was accused of having six barrels of whiskey which he removed from bond. It is alleged that three have disappeared. Two others have been found empty and the remaining one almost empty.

At the recent annual meeting of the State Nurses' Association which was held in Los Angeles, it was decided to appeal by lecture and literature to high schools and colleges for young women to enter the profession. Lillian T. White, director of the Pacific Division, Red Cross Nursing Service, was re-elected president; Mary L. Cole, first vice-president; Mary K. Cleary, second vice-president; Mrs. Julius S. Taylor, Bureau of State Hygiene, secretary; Clara Saunders, treasurer. The next convention will be held at San Francisco in conjunction with the 1921 session of the State Conference of Social Agencies.

Of the helpful efforts of the Americans in Serbia, Dr. Myers said yesterday:

"Our work is not only relief for present needs, but we are laying foundations for a permanent educational system, the ultimate results of which may not be immediately apparent; but the ground is fertile and if the seed is carefully sown who can tell how far our influence may be felt in the years to come. Our hope is in the children. In a few years they will be dictating the policies of their government, and we may be proud to feel that we have

had a hand in shaping the destinies of a nation.''

The first six months of 1920 shows a marked increase in the prevalence of rabies in California. Most of these cases are found in the San Joaquin Valley, especially in Fresno, Tulare, Kern and San Joaquin counties. Most of the cities and counties involved have passed effective muzzling ordinances which are being rigidly enforced. Edward T. Ross, State Sanitary Inspector, has been detailed to the San Joaquin valley, where he is engaged in advising health and peace officers regarding methods of procedure. Mr. Ross reports that 1,200 stray dogs were killed in Fresno county during the month of June, and that 500 such animals were killed in Kings county during the same month.

Dr. Irving R. Bancroft, Secretary State Board of Health, reports that during the month of May, 1920, the California State Board of Health in cooperation with the United States Public Health Service collected 12,000 ground squirrels in the central coast counties and in the upper San Joaquin valley. Of this number, 58 were infected with plague. These infected rodents were found in Alameda, Contra Costa, San Mateo, Santa Clara, Santa Cruz, San Benito, Stanislaus, Merced and San Joaquin counties. In April a little girl, who lived on a ranch in the hills of Alameda county, contracted plague and died and a few months ago fourteen fatal cases of pneumonic plague occurred in Oakland.

Professor Arthur Keith of the Royal College of Surgeons, England, has recently delivered himself of a pronouncement which seems not unlikely to get him into hot water. He stated a few weeks ago that ''the small man is invariably the intellectual superior of the tall man.'' ''Look,'' he says, ''at all or nearly all of the prominent figures in the world's history. The great Caesar was anything but a tall man. Napoleon was distinctly small, and so was Sir Isaac Newton. In our own day in the world of arms there is Lord Roberts, in the world of politics Mr. Lloyd George. In war the little Japs beat the big Russians. In all the evolutions of mechanical skill, little men as a rule have predominated.'' Leigh Hunt, in his autobiography, and others have said much the same thing as Keith.

At the California State Nurses' Association, whose annual meeting was recently held in Los Angeles, there was an interesting address by Dr. Marcia M. Patrick of Los Angeles on ''Our Summer Camp for Tuberculosis Children.'' The work in the last three years, since the three camps were established at Pasadena, Hermosa Beach and San Gabriel, through the co-operation of the Health Department, the Tuberculosis Association and the city, has been so successful, says Dr. Patrick, that those who have been active in aiding the children, are strongly advocating the need of a permanent camp and ''preventorium''. Children who have been cured in the camps came through the city clinics and were from the poorest sections of the city. With a ''preventorium'' established, says Dr. Patrick, tuberculosis among the poorer children can be greatly reduced.

The Los Angeles County Medical Association on June 9th elected the following members: E. F. Boyd, M. D., 416 Auditorium Bldg.; Hayes Carlin, M. D., 830 Title Insurance Bldg.; H. W. Chappel, M. D., 1123 Investment Bldg.; Julius Frankl, M. D., 830 Title Insurance Bldg.; F. S. Haggart, M. D., 117 So. Market St., Inglewood; J. C. Horton, M. D., 433 Title Insurance Bldg.; H. G. Hummel, M. D., White Memorial Hospital; John Augustus Maronde, M. D., 2401 So. Garfield Ave., Alhambra; F. L. Morgan, M. D., First National Bank Bldg., Venice; Edward F. Nippert, M. D., 1026 Marsh-Strong Bldg.; Robert

O'Neal, M. D., First National Bank Bldg., Venice; Giles S. Porter, M. D., 2816 Halldale Ave.; Louis G. Reynolds, M. D., 407 Merritt Bldg.; Charline Smith, M. D., 2672 West Pico St.; Leonard Stovall, M. D., 963 E. 12th St.; Robert A. Walker, M. D., First National Bank Bldg., Alhambra.

INCREASE IN AUTOMOBILE ACCIDENTS

According to the annual report of the National Highways Protective Association, the total toll of life taken by motor cars throughout New York State during 1918 was 969 persons. The death list in New York City was 528, as against 417 for 1917. Of 441 fatal accidents that occurred outside the metropolitan area, 416 occurred between April 1 and December 31, and only twenty-five between January 1 and March 31. The president of the National Highways Protective Association recommends a law for New York State similar to that in Massachusetts, Connecticut, New Jersey and Maryland, which in New Jersey has been responsible for cutting down the number of fatal accidents from 245 in 1917 to 197 last year—Journal A. M. A.

BOOK REVIEWS

CUNNINGHAM'S MANUAL OF PRACTICAL ANATOMY. Revised and edited by Arthur Robinson, Professor of Anatomy in the University of Edinburg. Seventh Edition, Volume Second, Therax and Abdomen, with 231 Illustrations, many of which are colored. New York; William Wood and Co.; Edinburgh, Glasgow, and London. Henry Frowde and Hodder & Stoughton, 1919. Price, Vol. II, $4.00.

In this edition the general text has been revised, and many new figures, representing dissections, sections, and radiographs, have been introduced. The instructions for dissection have been printed in a distinctive indented type; in many cases they have been rewritten and in some cases amplified. The latter changes, together with the additional figures, have caused an increase of size, and the division of the manual into three volumes. The volumes are of convenient size, and the text is easy to read and reliable.

THE TREATMENT OF WOUNDS OF LUNG AND PLEURA. Based on a Study of the Mechanics and Physiology of the Thorax. Artificial Pneumothorax—Thoracentesis—Treatment of Empyema. By Professor Eugenio Morelli, Assistant in the Medical Clinic of the Royal University of Pavia, Maggiore Medico, Field Hospital No. 79. Translated from the Italian by Lincoln Davis, formerly Lieutenant-Colonel, M. C., U. S. Army, and Frederick C. Irving, formerly Major, M. C., U. S. Army. Boston: W. M. Leonard, Publisher, 1920.

"There is need for a book like this of Morelli's, propounding a new method of treatment for the serious war wounds of lung and thorax, whereby the mortality is reduced from 25 to 30 per cent to less than 5, and which furthermore restores the function of the lung to a state incomparably nearer to the normal than was before possible, an achievement inexpressible in figures. To Professor Eugenio Morelli belongs the credit of having thought out and successfully applied a fifth form of therapeutic pneumothorax, a method with special indications and special technic adapted to the treatment of war wounds of the lungs and their pleural complications and sequelae." (Forlanini.) Such is the opinion of the "Maestro" of the author, which we quote to endorse. It is unfortunate that better paper was not used for such an important thesis, and the illustrations should be clearer. In the reproductions of radiographs of pneumothorax, the outlines of the lungs are scarcely discernible. The text is excellent and probably these defects will not be repeated in future editions. Morelli has demonstrated that artificial pneumothorax, in the treatment of wounds of the lung, prevents and controls hemorrhage, facilitates the closure and healing of the pulmonary wound, and obviates crippling adhesions—all of

which seems rational to those of us who have observed the therapeutic value of artificial pneumothorax in tuberculosis with hemorrhage.

A GENERAL INTRODUCTION TO PSYCHOANALYSIS. By Prof. Sigmund Freud, LL.D. Authorized Translation with a Preface. By G. Stanley Hall, President, Clark University. Boni and Liveright, Publishers. New York. Price, $4.00 net.

While Freudian themes have rarely found a place on the programs of the American Psychological Association, they have attracted great and growing attention and found frequent elaboration by students of literature, history, biography, sociology, morals and aesthetics, anthropology, education, and religion. They have given the world a new conception of both infancy and adolescence, and shed much new light upon characterology; given us a new and clearer view of sleep, dreams, reveries, and revealed hitherto unknown mental mechanisms common to normal and pathological states and processes, showing that the law of causation extends to the most incoherent acts and even verbigerations in insanity; gone far to clear up the terra incognita of hysteria; taught us to recognize morbid symptoms, often neurotic and psychotic in their germ; revealed the operations of the primitive mind so overlaid and repressed that we had almost lost sight of them; fashioned and used the key of symbolism to unlock many mysticisms of the past; and in addition to all this, effected thousands of cures, established a new prophylaxis, and suggested new tests for character, disposition, and ability, in all combining the practical and theoretic to a degree salutary as it is rare.

These twenty-eight lectures to laymen are elementary and almost conversational. Freud sets forth with a frankness almost startling the difficulties and limitations of psychoanalysis, and also describes its main methods and results as only a master and originator of a new school of thought can do. In one thing Freud agrees with the introspectionists, viz., in deliberately neglecting the "physiological factor" and building on purely psychological foundations, although for Freud psychology is mainly unconscious, while for the introspectionists it is pure consciousness. Neither he nor his disciples have yet recognized the aid proffered them by students of the autonomic system or by the distinctions between the epicritic and protopathic functions and organs of the cerebrum, although these will doubtless come to have their due place as we know more of the nature and processes of the unconscious mind.

There is a need for a general introduction to psychoanalysis, such as is here presented, that is authorative, a reliable guide, witten in understandable language.

PHARMACEUTICAL BACTERIOLOGY. By Albert Schneider, M. D., Ph. D. (Columbia University), Professor of Pharmacognosy, College of Pharmacy; University of Nebraska, Lincoln. Second Edition Revised and Enlarged with 97 Illustrations. Philadelphia; P. Blakiston's Sons & Co., 1012 Walnut Street, 1920. Price, $4.00 net.

The recent progress in bacteriological science has made it necessary to make certain changes and additions in the present volume. The following chapters have been added: Chapter III, The Origin of Bacteria; Chapter VII, Symbiology; Chapter IX, Zymology; and Chapter XII, Adenology. In addition to this wholly new matter, not given in the first edition, other additions have been made in the text. The subjects of soil bacteriology and of milk and water analysis, has been treated more fully. The chapter on sterilization and disinfection has been enlarged. A brief statement of sensitized bacterins, of anaphylaxis, of aggressions, and of storing biologies has been introduced. While this volume is primarily intended for students in colleges of pharmacy, it will also be found useful by practicing pharmacists. It is a pleasure to

ote the appearance of the second edi-
on of this meritorious pioneer work,
id to give it our endorsement. The
eld is ripe, and it is fortunate it has
een so efficiently covered.

HE MICROBIOLOGY AND MICRO-ANALYSIS OF FOODS. By Albert Schneider, M. D., Ph. D. (Columbia University), Professor of Pharmacognosy, College of Pharmacy, University of Nebraska; Fellow of American Association for the Advancement of Science; formerly Microanalyst in the California State Food Laboratory; formerly Microanalyst of the U. S. Bureau of Chemistry; Consulting Microanalyst and Bacteriologist; member Volunteer Medical Reserve Corps. With 131 Illustrations. Philadelphia; P. Blakiston's Sons & Co., 1012 Walnut Street. Price, $3.50 Net.

This volume is a guide to the study of
ie microbiological decomposition
anges in food, and presents a practical working basis for ascertaining the decomposition limits of foods suitable for human consumption, by means of the direct methods of microanalysis. The microanalytical examination of milk, of water and of other beverages is included. While the text is addressed to army dietitians and food examiners, it will be found equally suited to the needs of the dietitians, medical officers and food examiners, in the navy, and by analysts in food laboratories of all kinds, federal, state, municipal and private. It will serve as a text and laboratory guide for students in universities and colleges where courses in dietetics, in home economics, in food testing, in food decomposition, in food analysis, etc., are given.

MISCELLANEOUS

ILLIAM T. G. MORTON, THE DISCOVERER AND REVEALER OF ANAESTHESIA, AND HIS PLACE IN THE HALL OF FAME

New York, June 14, 1920.

ditor, Southern California Practitioner.

Dear Sir: On April 10th, you were
ood enough to publish my open letter
titled "No Physician or Surgeon as
et in the Hall of Fame." As you will
call I deplored the fact that no phy-
ian or surgeon had as yet been found
orthy to be named among the great
merican immortals. I ventured to sug-
st as the three most worthy names
illiam T. G. Morton, the discoverer of
her anaesthesia, Ephraim McDowell,
e first surgeon to perform a rational,
liberate and successful ovariotomy,
id J. Marion Sims, a great gynaecol-
ist, who perfected the plastic opera-
on in the vagina for the relief of
sical fistulae and invented the specu-
m. I stated that the nominations
ould be sent to the Senate of the New
rk University, University Heights,
ew York City, and that this should be done by every American physician who feels the great injustice done to the American medical profession by the apparent neglect or oversight of the previous electors.

I received many letters of approval of my humble efforts and of my choice of the three names mentioned. A few of my correspondents, however, objected to the name of Wm. T. G. Morton as not being the discoverer of surgical anaesthesia, and in the Journal of the American Medical Association of April 24th, there appeared a strong letter signed by Dr. S. J. Lewis, according to which the priority of the discovery of sulphuric ether as an anaesthetic belongs to Dr. Crawford W. Long. It would lead to no result to recall here all the details of the old controversy between Morton, Long and Jackson of half a century ago; the fact remains that before any one of these three men thought of the subject of anaesthesia, means to subdue pain by all sorts of physical agents, such as various vapors, lotions, etc., were employed, and even hypnosis was resorted to by Esdaile and

Elliotson (1790-1868), who operated upon hundreds of patients in the hypnotic state. Granted that Crawford W. Long discovered the anaesthetic properties of sulphuric ether before Morton, he did not make known this method of producing sleep. Long did not prove to the medical profession that surgical anaesthesia with the aid of sulphuric ether was "certain, safe and complete." These words were used by Dr. Henry J. Bigelow, a member of the staff which was present during the operation of that memorable day of Oct. 16, 1846.

Concerning the priority claims of Long and Jackson, Dr. J. Collins Warren, Moseley Professor of Surgery Emeritus, Harvard University, who wrote me only recently in reference to this matter, very pertinently says: "It is probable that Long performed three or four minor operations with primary anaesthetic and then abandoned his claims. As Dr. Keen says, he is deserving of nothing but censure for not having appreciated the value of the agent." Concerning the claims of Jackson and his heirs, Dr. Warren wrote: "Dr. Charles T. Jackson was very unwilling to have anything to do with the discovery at first, saying that Morton 'would kill somebody next,' and it was not until after he had attended an operation in the private practice of my father, to which he was invited, and saw Morton give the ether most successfully, that he came out the next day with an article in the newspaper claiming a share in the discovery."

The question resolves itself into what is meant by priority in the case of a great discovery. In Owen's 'Homologies of the Skeleton" we read the following definition of priority: "He becomes the true discovered who established the truth, and the sign of the truth is the general acceptance. Whoever, therefore, resumes the investigation of neglected or repudiated doctrine, elicits its true demonstration, and discovers and explains the nature of the errors which have led to its taeit o declared rejection, may certainly an confidently await the acknowledgment of his right in its discovery."

Francis Darwin in Eugenics Review 1914, makes it still clearer when he says "In science the credit goes to the ma who convinces the world, not the ma to whom the idea first occurs." Morto convinced the world; the credit is his.

The late Sir William Osler, our great est medical historian, to whom I re ferred in my first communication, con siders Morton the inventor and reveale of anaesthesia by sulphuric ether, an he speaks of him as a new "Prometheu who gave a gift to the world as ric as that of fire, the greatest single gif ever made to suffering humanity." H pertinently asks in one of his latest es says on the sbject (Annals of Medica History Vol. I, No. 4):

"Why do we not give the credit t Dieseorides, who described both genera and local anaesthesia, or to Pliny, o Apuleius or to Hiotho, the Chinaman who seems to be next in order, or to th inventor of the spongia somifera, or t Master Mazzee Montagna, in Beccaccio or to any one of the score or more o men in the Middle Ages who are know to have operated on patients made in sensible by drugs and vapors?"

In addition to the testimony of Osle that to Morton and to no one else shoul be given the credit, I may quote the fo lowing paragraph from a personal le ter sent to Mr. E. L. Snell by Olive Wendell Holmes on April 2, 1893 (Cen tury Illustrated Magazine, Augus 1894):

"Few persons have or had better rea son than myself to assert the claim o Morton to the introduction of artificia anaesthesia into surgical practice. . . This priceless gift to humanity wen forth from the operating theater of th Massachusetts General Hospital, and th

man to whom the world owes it is Dr. William Thomas Green Morton.''

As further evidence that to Morton should be given the credit, I will cite a paragraph from an address by Prof. William H. Welch, of Baltimore, delivered on Oct. 16, 1908, (the 62nd Anniversary of Ether Day) as follows:

''The attendant circumstances were such as to make the operation performed on October 16, 1846, in the surgical amphitheater of this hospital, by John Collins Warren, upon the patient, Gilbert Abbott, placed in the sleep of ether anaesthesia by William Morton, the decisive event from which date the first convincing public demonstration of surgical anaesthesia, the continuous, orderly, historical development of the subject, and the promulgation to the world of the glad tidings of this conquest of pain. Had this demonstration or any subsequent one of like nature failed of success, it is improbable that we should have heard much of claims to the prior discovery of surgical anaesthesia.''

I hope this will suffice to settle the controversy for good and that this letter may be as widely published in the medical press as was my first one on this subject.

Dr. Charles H. Mayo, one of the electors of this year, writes me as follows: ''It is a sad commentary that no medical man's work has been considered of sufficient importance to warrant a tablet in the Hall of Fame.'' Let there be no longer a division as to the nomination of Morton for the Hall of Fame. All those who are willing to be helpful in this matter may write to the Senate of the New York University or to any one of the 102 electors. The final election will take place July first. Fortunately, we have this year among the electors no less than four medical representatives—Major General Leonard Wood, Prof. Wm. H. Welch, and Drs. William J. and Charles H. Mayo. I hope the good and great General will forgive me for still claiming him as one of ours. A list of the 102 electors will be sent to anyone addressing his request to the Secretary of the Senate of the New York University.

We should have not only William T. G. Morton, but also the two other great Americans already mentioned who belong to our profession in the Hall of Fame—Ephriam McDowell and J. Marion Sims. However, William T. G. Morton should be the first to be placed among America's great immortals.

It may not be universally known that Morton died virtually in poverty and heartbroken because he had received no recognition for his epoch-making discovery and daring experiment. I feel that I cannot close this ardent appeal for justice to ''the inventor and revealer of anaesthetic inhalation before whom in all time surgery was agony'' better than by quoting one verse from ''The Birth and Death of Pain,'' a poem by S. Weir Mitchell, M. D., read on October 16, 1896, at the Commemoration of the Fiftieth Anniversary of the First Public Demonstration of Surgical Anaesthesia:

''How did we thank him? Ah! no joy-bells rang,
No paeans greeted, and no poet sang,
No cannon thundered, from the guarded strand,
This mighty victory to a grateful land!
We took the gift, so humbly, simply given,
And coldly selfish—left our debt to Heaven.
How shall we thank him? Hush! A gladder hour
Has struck for him, a wiser, juster power,
Shall know full well how fitly to reward
The generous soul that found the world so hard.''

KILL THE RAT, THE SPREADER OF PLAGUE

Calling attention to the discovery of bubonic plague in several American and Mexican gulf ports, and renewing his warning regarding introduction of plague from Mediterranean ports which are known to be infected, Surgeon General Hugh S. Cumming today urged communities throughout the country, and especially along the coast, to inaugurate rat-extermination and rat-proofing campaigns.

"Bubonic plague is primarily a disease of rodents, especially rats," said General Cumming, "and the disease can be controlled effectively by measures directed against the rat. The extermination of rats is all the more to be desired because of the tremendous economic damage they cause."

According to conservative estimates made by the U. S. Public Health Service on the basis of numerous surveys, there is at least one rat for every person in the United States. This estimate coincides with that for Great Britain and Ireland, and with authoritative figures for Denmark, France and Germany. The annual up-keep per rodent was computed by the same authorities as $1.80 in Great Britain, $1.20 in Denmark, and $1.00 in France. The depredations of the rats of the United States will very probably exceed the estimate for Great Britain. One-half a cent a day is considered conservative, but even on this computation, it costs the United States $180,000,000 a year to support its rat population. This does not include mice.

"The U. S. Public Health Service is prepared to detail trained experts to assist communities in organizing the fight against rats," said General Cumming. "Many of our officers have had extensive practical experience in this work, and know how to make it really effective. In the seaport cities the work of extermination should be supplemented by bacteriological laboratory examinations to determine whether or not plague infection is present among the rodents. In the inland cities this is not now necessary."

The U. S. Public Health Service has just published a new bulletin entitled "The Rat: Arguments for Its Elimination and Methods for Its Destruction." Copies may be obtained by addressing the U. S. Public Health Service, Washing, D. C.

New York, July 6, 1920.

To the Editor of the Southern California Practitioner,

Los Angeles, Cal.

My Dear Doctor:

You were good enough to publish my letter in reference to the election of the names of Morton, McDowell, and Sims to the Hall of Fame in the recent issue of your esteemed journal. In my letter I stated that the election would take place July 1st. I have since learned that the electors have until October 1st to make their decision, which gives all those who are interested time and opportunity to send their endorsement of all or of any one of the candidates mentioned to the electors or to the Senate of the New York University.

Since the publication of my last letter I have received a number of requests to include in the list of America's immortals the great Benjamin Rush, whom Roswell Park in his History of Medicine, calls "the most conspicuous medical character of the century." American internists will always hold Rush in grateful admiration as an acute observer of disease. His description of clinical phenomena are today as classic and authentic as when published, and of course I am glad to include the founder of Rush Medical College among those of our profession who should have a place in the Hall of Fame.

Very sincerely yours,

(Signed)

S. ADOLPHUS KNOPF, M. D.

The Managing Editor:

Dear Sir: Entirely in accordance with forecasts made by the Public Health Service over a year ago, bubonic plague has made its appearance in the United States. At the moment, foci of the infection are known to exist at New Orleans, Pensacola and Galveston, and in Tampico and Vera Cruz, Mexico. In Vera Cruz, the disease appears to have assumed the proportion of an epidemic.

With the definite knowledge we now possess regarding the transmission of this disease, and especially as to the role played by rats, the situation should cause no alarm or panic among the people of this country. Nevertheless, the very real menace of bubonic plague calls for an energetic campaign of extermination directed against the rat, and other rodent pests.

I am enclosing a brief summary of some important facts about rats, and would like to suggest that you interest the people of your community, especially the business men, in organizing an effective rat-extermination and rat-proofing campaign. Through your State Board of Health, the Public Health Service is ready to co-operate with your local health authorities, and to give expert advice as how best to carry on such work.

Your co-operating in this matter will be a distinct contribution to the promotion of public health.

Respectfully,

(Signed) H. S. CUMMING,
Surgeon General.

LOCAL ANESTHESIA

The general practitioner is frequently called upon to do minor operations in cases in which the administration of ether or chloroform is inadvisable or inconvenient. In such cases an efficient local anesthetic should have first consideration. Naturally, one would say, this suggests cocaine with its attendant disadvantages.

Fortunately, American chemists have discovered an agent, Apothesine, which has proved to be an effective anesthetic when injected into the tissues, while its use is not attended with the annoyances and risks that the administration of cocaine not infrequently entails. Apothesine is being used with brilliant results in the great surgical clinics of the country, not alone in minor surgery by any means, but in the performance of major operations of the most formidable character. Feats of surgical skill have been accomplished under Apothesine anesthesia that astonish even the most experienced observers. For example, a prominent New York surgeon recently reported that he had done 250 major operations with this anesthetic, including such procedures as resection of rib and drainage of lung abscess, gastro-enterostomy, and a very extensive thyroidectomy.

In minor surgery this agent is not less effective. Its action is prompt and enduring; in fact it is stated that its influence persists over an hour, thus making it possible to perform the operation and put in sutures, if necessary, without a second application of the anesthetic.

A minor point, perhaps, is the fact that Apothesine is not subject to the provisions of the anti-narcotic law, but can be obtained through the retail drug trade with a minimum of trouble and delay.

SOUTHERN CALIFORNIA PRACTITIONER.

Vol. XXXV. LOS ANGELES, AUGUST, 1920 No. 8

ANTE AND POST-OPERATIVE TREATMENT.*

BY C. L. LOWMAN, M.D., LOS ANGELES.

The last five years has emphasized and disseminated more than the previous twenty years, those features in surgical treatment which orthopaedic surgeons have been using for a long time. Preventive measures, ante-operative and post-operative measures are based on the functional outlook with definite relation to future function and efficiency. There was a general tendency, previously, on the part of many surgeons to be so deeply interested in the pathological process and the technic of the surgical procedure to be used in its eradication, that the question of physiological disturbances of function was given little consideration. Without minimizing the value of a thorough knowledge of pathology, it has been very evident that things functional have received comparatively little attention.

The time is coming when all patients with more or less chronic conditions, will receive thorough consideration in respect to both functional and pathological conditions in the sense that active procedures aimed at correction of both conditions will be instituted. For instance, a woman with uterine prolapse will be examined automatically for location of static faults, and physiologically for disturbances of organic balance, and when this is done, there will be less operating for backaches and neurotic conditions before other obvious faults are corrected.

It is a matter of common occurrence in orthopaedic practice to have patients referred for leg and backache, giving a history of one or more pelvic or abdominal operations having been done in an effort to relieve these symptoms, when they had never been stripped and stood up to have their faults in statics elicited. Many of these gave perfectly clear histories which evidenced this static strain and the chain of neural changes which often accompany it. The fact that actual organic diseases exists, only emphasizes the fact that every added pound of energy which the patient possesses must be conserved to aid in overcoming it. Consequently, each system of activity

*Read before the Orange County Medical Society, August 2nd, 1920.

in the body must have due consideration; circulatory, respiratory, eliminatory, mental and neural—especially sympathetic endocrine, muscular, and bony. The last is not least by any means.

The reason that so many chronic cases stay chronic is largely due to the fact that they are not completely gone over and all the points of nerve leakage ascertained. It is quite common to see patients who are struggling against some infectious or other pathological handicap, carrying a mechanical overload of twenty per cent, due to bad statics. This is frequently seen in bed patients as well as ambulatory cases. It is perfectly feasible not only to maintain proper bed postures, but to keep up muscle tone and nerve tone and aid physiological processes by properly applied physical and therapeutic measures.

I have maintained for years that the time would come when each hospital would have a gymnasium and physical therapy department for use in keeping up the efficiency of the hospital personnel, as well as for use as a definite part of the therapeutic equipment. This prophecy bids fair to be realized, for it is reasonable to suppose that the physio-therapeutic departments in military hospitals have come to stay, and already some have been established in civilian hospitals.

Immediate operations are necessary only in acute cases, and consequently there is usually ample time during which to establish a regime of physical supervision, by which I mean attention to all physical needs, both for correction and prophylaxis.

To illustrate: A middle aged woman, mother of two children, presents herself for pain and neuritic symptoms in the upper back and shoulder regions. She has considerable disturbance at her menses, her back being worse at that time, and she had considerable low back pain during her last pregnancy. Since nursing the last child, she has not regained weight nor strength, has occasional attacks of insomnia and suffers from indigestion and constipation. Examination of the pelvic viscera discovers a considerable degree of relaxation and prolapse with bogginess and congestion of uterus. Operation for some form of suspension or fixation is advised. This is obviously necessary, but it is equally obvious that the patient's general condition is not good and a little reflection will show that the symptoms for which she presented herself may or may not be cleared up by this operation unless proper attention is given to the rest of the faults, such as the neural condition due to bad statics, overstrain and the disfunction of the abdominal viscera.

The patient has placed herself in the surgeon's hands to have her health and efficiency restored to the normal. After a number of months of dragging around in a semi-invalided condition, should she be subjected to the shock of a major operation, the increased static strain, and the weakening effect of lying in a hospital bed, and be sent home in three weeks with wounds healed. Just this is occurring day after day in all our surgical centers. The patient is sent home and told to take it easy for a few weeks and report occasionally to the surgeon. Is the patient normal, or has she been restored to her maximum efficiency? Will nature do for her what the surgeon hopes or expects? Even though the temporary respite of the rest in bed and freedom from household cares has greatly improved her general condition, will she regain the degree of health and efficiency which should be hers?

Just how far should the surgeon's responsibility go? Let us say, for instance, that the surgeon notes such facts as follows: Static faults: The drooped shoulders, wide, prominent scapulae, long, relaxed back, pendulous or heavy breasts, lowered abdomen with hollow epigastric area, and perhaps some

slight pelvic tilt with pronated ankles. Mental condition: Worried and anxious, disposition changing, period of depression. Neural condition: Prickling and tingling and numbness over shoulders and down the arm, after sewing or reading or on efforts at concentration, arms feel heavy and pain in back increases, periods of insomnia. Circulatory: Feet and hands cold, especially in the morning, efforts at walking fast make her short of breath and heart palpitates, pulse ninety-four standing. Digestive: Constipated usually, occasionally dull right sided pain, some gas and odor, sensitive to pressure over epigastric area and in region of pelvic inlet over the ovarian region. Endocrine: Hair rather dry and brittle, teeth soft during pregnancy, skin dry. Menstrual: Breasts a little sore and heavy, cramp and pain a day or two before flow is established and relieved when flow appears, some low backache at this time, aggravated by too much activity, especially continued standing. Pelvic findings: As stated above. It is noted also that the patient is wearing a loose, ill-fitting, short-waisted corset and ordinary conventional shoes with narrow toes, round soles, and Cuban heels.

These are, roughly, some of the most salient symptoms, and the chances are that the case would usually be termed, "an ordinary case of neurasthenia, resulting from overstrain and made worse, if not caused, by the reflex disturbances excited by the pelvic pathology".

Now, let us see what anti-operative procedure of say two months' duration will do for this case. In the first place, packing and internal support for the pelvic condition to reduce congestion, weight and ligamentous strain, and its incident reflex irritation through the sacro sciatica sympathetic plexus; attention to faulty statics, rebalancing, proper shoes, broad heels not higher than one to one and one-fourth inches, flat soles, inner border of heels raised one-eighth inch to take muscle strain off the tibial group and the external thigh rotators (which fasten in and about the pelvis); a small sitting pad of from one-fourth to one-half inches under the low side to correct the lateral pelvic tilt; a proper corset with a high back that comes up over the scapulae, snugly fitted, the flare at the top of the corset being removed, extra darts under the scapulae and in the pelvic zone, and skirt on either side in front under the abdomen so that when laces are pulled up behind, the front will give an abdominal lift; gussets inserted under the bust down to and through the waist line relieving the pressure made by the dart taken up under the scapulae, thus making a point of release opposite the point of pressure; shoulder straps passed through the carriers placed beside the eyelets behind and passing under the arm around over the shoulders, crossing the scapulae to the opposite side and brought downward and forward across the waist line to fasten to a buckle attached on a level two inches inward from the anterior superior spine.

The crossing of these straps will hold the scapulae inward and backward, relieving the strain on the rhomboidii and trapezii, realigning the shoulder girdle and probably controlling largely the neuritic symptoms in this area. With the spine straightened, the abdominal viscera are lifted, the ribs raised, respiration, circulation, and elimination are all favored and the ligamentous and muscular overload is placed on the bony frame work where it belongs.

This attention to static strain will at once restore ten to twenty per cent of the nerve energy previously wasted by making muscles and ligaments do the work the bony structure should do, and by removing in part obstacles to proper physiologic functioning of the visceral organs.

Mentally, you have at once gained the patient's confidence and interest by at-

tention to these fundamental things which she can easily see. The immediate response to these measures insures her faith in you and she knows she is going to get well.

A high percentage of such cases get relief from many of these symptoms within a few weeks. They eliminate better and consequently sleep better, their toxic elements are reduced and vague neuritic sensations begin to disappear. It must be explained to them, however, that the greatest benefits will come from efforts to work with nature and attention to all hygienic and dietitic laws will bring its reward.

Activity and rest must be prescribed definitely and specifically in accordance with the physical limitations of the individual, and in accordance with the stage of the abnormal conditions present.

Naturally, absolutely fixed rest would be indicated in acute and subacute conditions, whereas, moderate exercise may be allowed and prescribed in the more chronic cases. The patient must be told that all these procedures are to rest the various structures, and to prevent and break the old, bad postural habits. Consequently, to begin the building up processes, certain exercises to strengthen the weakened structures will be necessary. These need only be simple, slow movements with deep breathing, but should be given lying down.

In this particular type, gentle, resistive exercise with one-half to one minute's rest between every three or four movements, will gain the best results. This will show the heart rate and increase the muscle metabolism without any production of strain or fatigue. In heavy individuals, shorter, more rapid and more active exercises would be of value but should also be given lying down.

Rest positions. Preferably the patient should sleep on a hard mattress with only a very small pillow or none at all, and the foot of the bed raised six to eight inches. Two or three times a day the patient should assume the Goldthwaite position, which has all the advantages of the knee-chest position and none of its disadvantages. It is assumed as follows: Patient to lie prone with the pelvis and legs supported on bed or couch, upper trunk, head and arms, resting on a chair or box, the level of which should be from six to ten inches lower than the level at which the pelvis is held. If the pelvis is not allowed to slip off its support, no strain due to curving forward in lumbar region will result. At the same time the dorsal kyphosis will be passively corrected. If if it is desired that air enter the vagina in order to allow correction of the pelvic viscera, the legs can be separated without influencing the back position. This position should be maintained for thirty minutes two or three times a day.

The patient should refrain as much as possible from all activities which produce strain from concentration, such as watching exciting "movies," or anything requiring fixing of the attention. Such activities produce back strain, especially in the cervical, dorsal, and shoulder girdle areas. They must realize that more consideration must be given to preparing themselves to go through the operative procedures, and, temporarily, the simple life is the best.

Next: Operation. We will say that this is performed with good result. The patient's back has been supported on the operating table and consequently no strain and stretching has occurred in the lumbosacral region. She is placed in a bed whose vicious sag has been removed, and later she is not allowed to use, except for very short intervals, the equally vicious back rest which strains all the back and pelvic muscles, and allows the relaxation of the cervical fascia, the mesenteric attachments and the intra-pelvic ligaments. The foot of the bed is kept elevated, unless contra-indicated by the surgical needs.

As soon as the wound is healed and less sensitive, a soft pad is placed over it and the corrective posture corset, which the patient previously wore, is put on, supporting the abdominal wall, keeping the spine in proper alignment, and preventing the downward pressure of lowered abdominal contents from interfering with, or jeopardizing the operative results.

The patient goes home without having experienced much shock. Danger from infection has been reduced. She has had little or no post-operative backache from sacro lumbar and sacro iliac strain. Her convalescence is shorter and more satisfactory than the average case. As soon as she is strong enough, she begins again her exercises, first, in the lying position. All exercises which would interfere with the operative measures are eliminated, but special attention can be concentrated on the correction of shoulder girdle and upper back, and the foot and leg positions. The patient reports frequently for advice along the lines of physical supervision. She will need to find out about increasing her activity and to have corset inspection and alteration as her body changes take place. The abdominal girth will get smaller, necessitating additional darts in the pelvic zone. The increased depth and width of the upper abdominal region requires enlarging the corset in that area. Improvement in strength of back muscles and better carriage will later allow the removal of the shoulder straps, or else a new corset without shoulder straps may be worn occasionally for social wear.

If the breasts are heavy, and tend to drag the shoulder girdle downward and forward, a breast support such as I have described in another article will be of service, both in preventing this dropping of the bust and in holding the scapulae backward in a better position. When this is worn the high back corset is no longer necessary.

This procedure may have to be carried out over considerable time, possibly for one or two years. That is, there will be occasional consultations for advice, along the lines suggested. However, this line of follow-up work is valuable to the surgeon as well as to the patient, because he has an opportunity to watch the results of both the operative and non-operative aspect of the treatment. His reputation is bettered in that he becomes known as one who is thorough, careful, and appreciative of the many minor functional disturbances to which the women of our times are heirs. It will also suggest another step for him, namely, to begin inspectlng the children of these same mothers, with an eye to correcting the potential defects and abnormalities which heredity and environment have wished upon them. He will thus be doing more constructive and preventive surgery than he could possibly accomplish with his knife.

C. L. Lowman, M. D.,
Los Angeles, Calif.

FIBROIDS COMPLICATING PREGNANCY.*

BY AIME PAUL HEINECK, CHICAGO, ILLINOIS.

In the course of operative work on the female pelvis, I have encountered cases of uterine fibroids, some associated with appendicitis, others with gallbladder disease, a few with ectopic pregnancy, and many more with uterine pregnancy. Curious to know the influence of uterine fibroids upon pregnancy and of pregnancy upon fibroids, and conscious that the subject had not received the study which its importance merits, I collected and consulted the

*Author's Abstract of a paper read before the Illinois Medical Society, at Rockford, Illinois, May 18, 1920.

cases of fibroids complicating pregnancy reported in the French, English, and German medical literature during the years 1908-1918 inclusive.

The conclusions herein stated are based upon my personal clinical experience, supplemented and controlled by an analytical survey of 380 cases reported with adequate data and in which the diagnosis of fibroids complicating pregnancy received operative or post-mortem confirmation.

1. During pregnancy, women are subject to many pathological conditions that influence gestation, parturition and sexual life. For the relief or cure of some of these conditions, operative treatment is necessary.

2. Appendicitis irrespective of type or manifestations does not call for the induction of abortion or premature labor. By timely and skillful removal of the diseased appendix, gestation is not interrupted and parturition will not be influenced.

3. Cholelithiasis complicating pregnancy does not warrant the performance of abortion or the induction of premature labor. Appropriate operative measures palliate or cure cholelithiasis and its sequelae, exert no harmful influence on gestation, and do not in any appreciable degree impair the expulsive power of the abdominal muscles.

4. Uterine fibroids afflict all races and originate only during the menstrual period of life. They are more frequent than originally suspected: however, no matter if comparatively rare, inasmuch as two lives are at stake, the subject demands adequate study. They antedate, complicate, co-exist with, or are complicated by pregnancy, single, twin or multiple uterine or extra-uterine. They have been found in nulliparae, primiparae, deutiparae, and multiparae.

5. Uterine fibroids occur in gravid uteri, otherwise normal, or presenting one or more other anomalies, congenital or acquired. They vary in number, site, size, anatomical relations, shape, consistency, structure, mode of implantation and rate of growth.

6. Uterine fibroids involve the cervix, the body, or the entire uterus. Their relation to the various layers of the uterus is the basis of the following classification: subserous or subperitoneal, interstitial or intra-mural, submucous and mixed. Submucous and subperitoneal fibroids are either pedicled or sessile.

7. Uterine fibroids like other tissue-masses are subject to inflammatory and degenerative changes which supervene either before or during gestation, abortion, labor, or premature at term, or the puerperium. Owing to their low vitality, these neoplasms offer but little resistence to invading germs implanted upon, or conveyed to them by way of the lymphatics or blood vessels. Inflammation of a fibroid terminates in gangrene, suppuration or formation of adhesions.

8. Inflammatory adhesions by displacing and fixing the gravid myomatous uterus, interfere with its functions and that of contiguous viscera, and are an important factor in the eitology of dystocia.

9. Uterine myomata are subject to calcification, fatty, myxomatous, cystic, or red degeneration. Red degeneration of fibroids is an aseptic, necrobiotic process characterized by haemolysis and autolysis. Though occasionally met in non-gravid myomatous uteri, it is more frequent, more extensive, and more intensive in uterine fibroids co-existing with or complicating pregnancy. The process of red necrosis may advance to complete liquefaction of the tumor with rupture either into the peritoneal or uterine cavity and secondary infection.

10. Pathological conditions co-existing with uterine fibroids complicating pregnancy are either purely coincidental or determined partly or wholly by the noeplasm. The mechanical objective and subjective symptoms of

uterine fibroids are determined to a large extent by the location, number, size, shape, structure, rate of growth, and other characteristics of the neoplasm. Pressure upon the vascular channels is provocative of oedema involving the legs; upon the nerves of the sacral plexus, of pain; upon the intestines, of intestinal obstruction; upon the rectum, of rectal tenesmus, constipation and diarrhoea. Pressure upon the kidneys and ureters is followed by anuria and uremia; upon the bladder by vesical tenesmus, frequent, painful and difficult micturition, and in some cases by retention of urine.

11. All acute inflammation and all degenerations of uterine fibroids determine marked local and constitutional symptoms, chief among which are fever, pain and tenderness. Clinical analysis and operation demonstrate that these acute symptoms are due to one or the association of two or more of the following factors:

(a) Oedematous infiltration of tumor.

(b) Rapid or sudden increase in size of tumor, irrespective of cause.

(c) Impaction or incarceration of tumor in pelvis.

(d) Mechanical pressure exerted by the fibroid upon the bladder, ureters, rectum, etc.

(e) Bacterial inflammation of myoma, phlegmonous, suppurative or gangrenous in type.

(f) Degeneration of tumor, fatty, cystic, myxomatous, red.

(g) Torsion of tumor's pedicle.

(h) Torsion of pregnant myomatous uterus upon its long axis.

(i) Peritonitis, localized and diffuse.

(j) Simultaneous adnexal disease, with or without peritonitis.

(k) Beginning abortion or premature labor.

12. Fibroids by virtue of their weight, volume, or location can directly cause any of the various malpositions and displacements of the uterus: —pathological anteversion, anteflexion, lateroversian, lateroflexion, retroversion, retroflexion, pelvic incarceration, pelvic impaction, etc.

13. The diagnosis of co-existing pregnancy and fibroids is difficult to establish. The signs of pregnancy may be mimicked by fibroids and vice versa. Some signs as uterine soufle, bluish discoloration of the vaginal walls, Braxton-Hicks intermittent uterine contractions are common to both conditions. Ballottement and abdominal palpation give analogous findings in pregnancy and in movable subperitoneal fibroids.

14. Uterine fibroids, as a rule, impair markedly a woman's reproductive powers; to what extent, is as yet not fully determined. It has been observed that myomectomy in women previously sterile, has been followed by pregnancy.

15. Uterine fibroids are a grave menace to pregnancy during its entire course. Not infrequently, they cause abortion, death of foetus with retention of ovum in utero, or premature labor.

16. They retard or absolutely arrest the expulsion of a living or dead child through the natural channels and not uncommonly necessitate the employment of radical means of delivery. The danger to the child's life is proportionate to the amount and nature of obstruction, duration of labor and method of delivery.

17. Fibroids complicating pregnancy endanger the maternal life during gestation, labor and puerperium, chiefly through hemorrhage and infection secondary to changes in the tumor itself or engendered by it in the foetal or maternal tissues. Placental retention, post-partum hemorrhage and puerperal sepsis are important.

18. The treatment is most successful that best fulfils the following three indications: the delivery of a living and viable child, the complete removal of all fibromyomatous tissue and the restoration of the mother to sexual and

anatomical integrity. Timely resort to surgery alone enables us to satisfy those requirements. This is a condition in which watchful waiting must give place to safety first.

19. Operative intervention is imperatively indicated in the presence of the following:

(1) Bad general condition of mother.

(2) Intolerable pain.

(3) Inability to work.

(4) Dispnoea due to size of tumor.

(5) Rapid growth of tumor.

(6) Extreme abdominal distention.

(7) Kidney breakdown.

(8) Pelvic incarceration or pelvic impaction of tumor.

(9) Repeated and profuse hemorrhages.

(10) Torsion of tumor's pedicle.

(11) Rotation of tumor on its long axis.

(12) Gangrene of tumor.

(13) Tumor degeneration, cystic, red, etc.

(14) Septic complications.

(15) Severe pressure on neighboring organs, ureter, bladder, rectum, etc.

(16) Size and multiplicity of fibroids impeding the normal progress of pregnancy.

(17) Fibroids that are a hindrance to birth through the normal channels.

(18) Fibroids in the body of the uterus interfering with uterine contractions.

(19) Fibroids interfering with the outflow of the lochia.

(20) Fibroids springing from the back of the lower segment of the uterus.

20. In the treatment of uterine fibroids, the ideal operation is myomectomy, because (1) in the sterile woman the uterus being left intact, conception may follow: (2) in the pregnant uterus, it removes the cause of the disturbing symptoms and cures the condition with mutilation, (3) it gives gestation the opportunity to continue undisturbed, (4) it permits the delivery of the child through the natural channels, (5) the post-operative shock is mild, the convalescence short, and the mortality rate for both mother and child is low, (6) the menstrual and generative functions of the mother are retained, (7) if not feasible, it does not preclude the performance of the operative act best suited to the case at hand.

21. As pregnancy approaches its completion, the delivery of a living child becomes an important new factor. If at term the child is living, it must be looked upon as viable, and the medical attendant should act accordingly. In gravid myomatous uteri, ceasarean section is to be performed, at or near term, in all cases in which delivery through the natural passages would inflict serious injury either upon the mother or the child.

22. For fibroids complicating pregnancy, hysterectomy is the operation of last resort. It is justifiable only:

(1) If woman is near the menopause.

(2) If tumor enucleation proves impossible, because (a) location, volume, and number of tumors, (b) general myomatous degeneration of organ.

(3) If labor at term would be impossible (contracted pelvis) and the woman refuses to wait for ceasarean section.

Dr. Frank J. Wagner has resigned as health officer of Santa Monica. The salary attached to the office is but $40 a month. Doctor Wagner does not think it sufficient and his resignation came after the commissioners had refused to increase the amount. Doctor Wagner served all through the influenza epidemic and the visitation of smallpox. He showed that the City of Venice paid $175 per month to its health officer, but the commissioners did not regard this as a criterion.

SOUTHERN CALIFORNIA PRACTITIONER.

A MEDICAL, CLIMATOLOGICAL AND SOCIOLOGICAL MONTHLY MAGAZINE.

This journal endeavors to mirror the progress of the profession of California and Arizona.

Established in 1886 by Walter Lindley, M.D., LL.D.
DR. GEORGE E. MALSBARY, Editor and Publisher.

Address all communications and manuscripts to
EDITOR SOUTHERN CALIFORNIA PRACTITIONER,
1414 South Hope Street, Los Angeles, Cal.

Suubscription Price, per annum, $1.00.

EDITORIAL

CALIFORNIA CITIES GROWING.

A partial list of California cities with the figures for their population, according to the 1920 census, is appended. The growth of some of the smaller cities is truly remarkable. Public health responsibilities have grown along with population and the health officers of these husky young cities have many duties to perform in the maintenance of the public health in their communities.

POPULATION 1920 CENSUS.

	Population	Per cent increase
Los Angeles	575,480	80.3
San Francisco	457,147	21.9
Oakland	312,422	44.1
San Diego	74,683	88.7
Sacramento	65,876	47.3
Berkeley	55,886	38.2
Long Beach	55,593	212.2
Pasadena	45,334	49.7
Fresno	44,616	79.2
Stockton	40,296	73.3
Alameda	28,806	.....
Richmond	16,853	147.6
Pomona	13,505	32.3
Eureka	13,212	11.5
Venice	10,385	233.0
Chico	8,872	136.3
Napa	6,757	16.7
Petaluma	6,226	5.9
Marysville	5,461	.....
Watts	4,529	135.7
Huntington Park	4,513	246.7

EDITORIAL NOTES

Dr. Allen Peek has located in Santa Paula.

Dr. H. O. Koford has returned to Santa Barbara.

Dr. W. A. Hodkinson has been appointed health officer and police surgeon of Santa Monica.

"Local Anesthesia for Rectal Surgery" is the title of a reprint by Dr. E. Jay Clemmons of Los Angeles.

Dr. David Gustason has taken offices in the new Pantages Building. Dr. Joseph R. Shuman has located in the Brockman Building.

Dr. Wayland A. Morrisson has been chosen as consulting surgeon for the Los Angeles branch of the Goodyear Tire and Rubber Co.

Dr. Chas. W. Bryson and associates are selling stock in a hospital organization. They say the project will involve the expenditure of at least $850,000.

Dr. C. E. Fisher, formerly of Chicago has located in San Diego and will be associated with Dr. Lischner in the management of the Alpine Sanatorium.

Dr. John L. Dryer, the pioneer surgeon of Santa Ana, underwent a serious surgical operation August first and has, we are happy to say, made a prompt recovery.

Dr. J. Sevey Hibben, city health officer of Pasadena, who has been in quite a serious condition due to infection through a bruised heel, has almost completely recovered.

Col. Frederick H. Albee, the bone surgeon, has been vacationing in Southern California and meanwhile enjoying several columns of interviews in the Los Angeles dailies.

That the universal American habit of suspending the trousers by means of a belt is doing much damage, was asserted by Dr. Charles A. L. Reed of Cincinnati, former president of the American Medical Association, at the university commencement in Cincinnati the other day. We recommend Chas. for president of the International Anti-Belt Society.

Plans have been received by Capt. C. H. Curl, surgeon of the San Diego Naval Hospital for a $1,000,000 naval hospital at Balboa Park, Miss Susan Dancer, an alumnus of the Training School for Nurses of the California Hospital, and later chief surgical of that institution, and who was chief of the nursing unit that went to the front under Dr. Rea Smith, is superintendent of nurses under Capt. Curl.

Dr. Irving R. Bancroft, secretary of the State Board of Health says:

Reports of the widespread prevalance of whooping cough come to the State Board of Health from many sources, although the reports received from health officers do not show any very great increase. It is important that cases of whooping cough be reported, as required by law, and health officers should take steps to secure such reports from physicians who may be dilatory in the matter.

This disease is one of the most serious diseases of childhood and miliary tuberculosis more often follows whooping cough than any other communicable disease that is commonly found among young children; and as a predisposing factor in general tuberculosis whooping cough is second only to measles. All children, but especially very young children, should be protected against this disease. Most deaths from whooping cough occur during the first year of life.

Dr. Bancroft also has this to say about poison oak:

The extremely volatile oil which is

so readily transferred to the skin or clothing of the passer-by who brushes against the poison oak plant penetrates the skin very easily and causes the acute irritation. Immediately after exposure to poison oak the individual should wash with soap and warm water, followed by a dusting with talcum powder. If this does not bring relief the application of alcohol or spirits of camphor is advised. The use of greasy ointments or salves should be avoided as they only aggravate the irritation.

On the City Council's recent request for a statement as to cases treated and results achieved by the narcotic clinic at the Temple Block, Dr. Elmer R. Pascoe, acting health commissioner, reported that up to August 1 there had been 548 registered cases. Of this number Dr. Pascoe says there are 299 active cases and 249 that have been closed. Eighteen cases, he states, have been sent to the psychopathic ward of the County Hospital.

The Los Angeles County Medical Association recently elected the following members: Charles P. Bagg, M. D., 1024 Arapahoe St.; William C. Finch, M. D., 1866 W. 43rd St.; H. S. Huckins, M. D., 959 N. Fair Oaks, Pasadena; Audley O. Sanders, M. D., 3401 Mission Road; R. Nichol Smith, M. D., 631 Marsh-Strong Bldg.; R. L. Schulz, M. D., 1020 Story Bldg. Dr. Bagg was one of the premier class that graduated from the medical department of the University of Southern California in 1888. After serving with distinction as surgeon in the navy he has resigned and located in Los Angeles.

The city treasury of Los Angeles was enriched $20 when the fine assessed Dr. Hiram Gallagher of 803 South St. Andrews Place by Police Judge Chambers for disturbing the peace was added to it. The physician was charged with disturbing the peace of a number of persons who were distributing literature protesting against vivisection. It was charged that Dr. Gallagher tore up some of the literature when it was handed to him. It might have been, in wisdom for Dr. Hiram to have put on the soft pedal, but it is refreshing to hear of a scientist who will speak his sentiments right out in meeting.

The Medical Record says: Dr. Jesse C. Green of West Chester, Pa., died July 26, as the result of falling from a step ladder while hanging a picture. He was born in 1817. He never used tobacco or intoxicants, and took his last cup of coffee in 1844. Until six years ago he is said to have been in the habit of taking a daily ten-mile bicycle ride before breakfast. For a number of years Dr. Green was president of the Pennsylvania Dental Society, for nearly fifty years he was a local volunteer weather bureau agent, and for more than seventy years he was treasurer of a local fire company. He was a member of the Society of Friends.

Dr. Irving R. Bancroft, the very efficient secretary of the California State Board of Health, resigned at the August meeting in order to accept a much more remunerative position offered him by the Metropolitan Life Insurance with headquarters in Los Angeles. Dr. Walter M. Dickie was elected to succeed Dr. Bancroft. Dr. Dickie has been connected with the Bureau of Social Hygiene of the State Board of Health for the past three years and has been director of the bureau since January of this year.

He has maintained a high standard in that bureau, which was the first of its kind to be established in the United States. In co-operation with the United States Public Health Service and the Interdepartmental Social Hygiene Board the work has grown remarkably.

PHILADELPHIA, Aug. 10.—Dr. George D. Heist of Germantown, who died Sunday night in the Jewish Hospital, proved his theory of germ cul-

ture at the cost of his life, according to Dr. Myer Solis-Cohen. Discussing his colleague's death, Dr. Solis-Cohen said: "In studying why some animals develop pneumonia and others never take the disease and why some are susceptible to infantile paralysis and others could not be inoculated, Dr. Heist found that when the germ of pneumonia was grown in the blood of a chick, known to be immune, the germ was killed; while in the blood of a mouse, known to be susceptible, the germ grew with great rapidity. While in the army during the late war, Dr. Heist made an investigation of epidemic cerebro-spinal meningitis, in the course of which he showed the germs of this disease grew readily in his own blood, which indicated, according to his theory, that he was highly susceptible to this disease. When he was taken ill of the disease he made a scientific study of his case. The development of the disease bears out his theory in every respect."

While the medical department of the University of Southern California has been closed and there are rumors that the medical department of Stanford University will soon close, the osteopaths and chiropractics are filling the void thus created. The following from the Los Angeles Express is an indication: One of the largest chiropractic colleges in the world will open October 1 in Los Angeles if the plans of the promoters are perfected, according to one of the officials of the Pacific Chiropractic College. The new college will be situated in the former Occidental College, at Avenue Fifty and Pasadena avenue. The Pacific College, which is incorporated for $500,000, is said to have paid $100,000 for the old Occidental property and will spend $45,000 on the remodeling of the buildings. The faculty will consist of five professors at first, with salaries ranging from $3000 to $5000, each man working six hours per day. It is expected that 500 students can be accommodated in the new college, of which Willis Keach and Grant Hess are the leaders. The Pacific Chiropractic College will be the third now operating in Los Angeles and the fourth in the state.

The Los Angeles Record of recent date says: A strictly charitable surgical clinic which will rival the Mayo Hospital in Rochester, Minn., soon will be established in Los Angeles. This announcement was made today by the Lutheran Hospital Society, which took over the California Hospital. This property, the pioneer medical institution of Los Angeles, was transferred at a purchase price of $350,000. The new management will take possession of the property at Fifteenth and Hope streets within six months and construction will be started immediately on a laboratory, clinical building, a modern maternity hospital and other important additions to the group. The new hospital will not be operated for private profit, members of the Lutheran Hospital Society said today. The aim of the directors will be to care for citizens, who can not afford treatment in a private institution, but whose pride keeps them from going to a civic hospital. Specialists in every class of medical and surgical work will be on the staff of the new clinic and its doors will be open to everyone regardless of color, creed or wealth.

SOUTHERN CALIFORNIA PRACTITIONER.

Vol. XXXV. LOS ANGELES, SEPTEMBER, 1920 No. 9

SPINAL ANESTHESIA IN OBSTETRICS.*

BY HARRY THEODORE COOKE, M.D., LOS ANGELES.

The title of this paper should be, **Spinal Analgesia in Obstetrics, or Painless Conscious Childbirth,** through the use of spinal injection. Analgesic, because pain sense is abolished without the loss of consciousness. The whole world is trying to get rid of pain. Pain is a protective reflex, propotent, in that its inhibitory effect on other reflexes is more marked than that produced by any other quality of stimulus. This prepotency of pain sense seems necessary to the continued existence of the individual, but it may also become pathological as evidenced by the condition known as protracted labor, usually due to abnormal conditions. Pain, while it is protective, it may also become destructive, and if long continued, it becomes intolerable. Then it is that the human being turns to the physician for help and relief from suffering. No one is more worthy of this relief than the woman upon whom the burden of child bearing is imposed. There are many women who would not object to, and many would desire children if they were not fearful of labor and its consequences. Owing to various causes the number of normal, comparatively painless deliveries are few, and women are looking to the profession for relief. It is four years now that I have had spinal puncture and injection under observation, under varied conditions, having reported 966 operative cases by its use. In presenting this paper, I do so with the full knowledge of the extent of the field, and the clinical value of this technic, and the peculiarities and possibilities of spinal injection. It is about two years and a half ago, while on my service in the County Hospital, that I was impressed with the possibility of relief from pain through the medium of spinal injection, and still retain the use of the abdominal muscles. After giving a spinal injection for a case of rectal prolapse, the patient was asked to strain down, as in defecation, and he literally seemed to turn the rectum inside out, and cautery was applied to the part absolutely without pain, and my deduction on the spot was, "Why could not a woman do that in childbirth without pain," and I resolved to try it some time, and this conviction has not been shaken since, and I

*Read before the Los Angeles Obstetrical Society.

am presenting to you these ideas, convictions and results at this time, so that the profession can share in them. With the experience that I have had with using spinal injection on hundreds of people, male and female, for operative procedures, I know what to expect from its action in the human body, the question then being not whether I could get anesthesia which was assured, but whether it would act as a general anesthetic to the extent of preventing uterine contractions, and thereby require forceps. I felt confident that there must be a point below which I could get desonsitication and relaxation, and above that normal function. This is the case with all spinal analgesias. This point can be brought down to within a half inch on the surface of the body. I was confident that I could so control the anesthetic agent that uterine contractions could go on and the mother deliver the child with no more pain then that of defocation, and be fully conscious and aid in her own delivery. "Bainbridge, in his chapter on spinal analgesia in Gwathmey's book on Anesthesia, quotes Barker as saying, 'from my clinical studies, that no permanent structural change in the nervous structures leading to definite symptoms has been proved to be due to the injections.'

"Bainbridge, states the course of the disappearance of sensibility to pain is segmental, proceeding from the fourth or fifth sacral, segment by segment to whatever limit it reaches in the individual case." This is one of the peculiarities of this method, which I have noted from the first, and taking advantage of this fact, is a factor that I have used in the development of my own technic.

"Anesthesia may be partial or complete with reference to the extent of the body involved as well as to the degree to which sensation is abolished." Let us consider what we propose to do to make child birth conscious and yet painless, the structure we are dealing with are the fundus and cervix composing the uterus and the vagina and their supporting structures composing the floor of the pelvis and the perineal structures, also the physiology of labor, both normal and abnormal in the delivery of the child through the birth canal, and the amount of dystoeia present, which the anesthesia will have to overcome. "Williams states that transmission of impulses through the cord are not essential to the act of labor. Kruiger and Offergold prove that in animals section of the cord, and separation of the uterus from all extrinsic nerve connections, has no further effect upon labor than to render it painless. Routh and others on observations on course of labor in women, who have sustained destructive injuries of lower part of the spinal cord, show that labor may progress painlessly and normally, except by the expulsive efforts on the part of the abdominal wall." Keiffer and others have shown that the uterus has a three-fold nerve supply; principally from the sympathetic system, partly from branches from the lumbar cord, and partly from its intrinsic nerves, and that uterine contractions may follow stimulation of any of them. The uterus is usually considered as a whole in describing its innervation, in the anatomies and dissection books; but I claim that the fundus and the cervix are distinct in their functions, by the clinical results that I have been able to obtain. Intrinsic nerves are the main factor in uterine contractions, the central nervous system has principally a regulative function, makes possible the perception of pain, and controls the voluntary abdominal contractions, and the sympathetic system regulates the vascular conditions. The functions of the spinal nerves are of sensation and motion, the sensory nerves of the cervix are de-

rived from the second, third and fourth saoral, with ramifications through the pelvic plexuses of the sympathetic system. The vagina supplied from the hypogastric plexus the fourth sacral and the pudic nerves, the female perineal nerves are from the pudic inferior hemorrhoidal superficial perineal deep perineal, muscular filaments of the pudic and dorsal nerve of the clitoric. De Lee's Obstetrics states: "The nerve supply of the uterus is very rich, and comes from both sympathetic and nervous systems; motor fibers are derived from the sympathetic passing down from the aortic plexis; they are reinforced by fibers from the solar renal and genital ganglia, forming a large plexus above the promintory of the sacrum, near the bifurcation of the aorta, and called the great uterine plexus; from here the fibers pass on either side of the rectum through the hypogastric plexuses to the sides of the uterus. Cerebrospinal fibers coming from the pneumogastric, phrenic, and splanchnic nerves follow the same course. Their function is unknown."

"The close nervous connection between the uterus and the stomach and heart may explain the reflex phenomena intercurrent between these organs. Sensory fibers come from the spinal cord through the sacral nerves, being also distributed via the great cervical ganglion. **That the sensory fibers come from the spinal cord in this way is shown by the clinical observation of painless labors in paraplegic women, and also rendering the labor painless by the injection of cocaine into the spinal canal. The region supplied by the cauda is made anesthetic.** The great cervical ganglion (Frankenhauser) is a triangular mass of ganglion cells and nerve fibers lying at the side of the cervix and upper vagina, one-half inch wide and three-fourths of an inch long. During pregnancy it grows to be two inches long and one and a half inches wide. Another ganglion exists on the posterior wall of the cervix. The nerve centers are less well known. One is believed to exist in the cortex, one in the medulla, in the cerebellum and in the lumbar enlargement of the cord, because irritation at these points causes uterine contractions. **There is an independent nerve center in the uterus, because the organ acts even when removed from the body; cases of paraplegia are on record where labor was normal or even precipitate.**

This local center is supposed to be the great cervical ganglion, but there exist ganglionic cells in the uterine muscle, and they form occasional small plexuses around the blood vessels. (Bar.)"

So much for the anatomy, but it is the functions of the tissues involved that we are most concerned with. The uterus is an involuntary muscle, the cervix I take it has a function similar to that of the sphincter ani, namely that of holding back material above it, whether it be menstrual flow, clots or the products of conception, and is in tonic contraction until it is overcome and forced to relax by the coordinate powers above it. We have here then two opposing forces, contraction and dilation. Two factors in opposition to each other, as much so as flexors and extensors in tonic opposition to each other in any part of the body. A muscle has but one function, that of contraction, when it is relaxing it is inert, consequently another muscle is necessary to oppose it to secure function of the part, usually to move a joint. This requires a separate nerve control, by this deduction I claim the fundus and cervix are innervated separately, and that there is a sharp line of demarkation of nerve influence which I place at Bandl's ring, or between the upper and lower uterine segments. So in studying their functions, the only time at which the

fundus and cervix are in harmony with each other or are co-ordinating, is when the uterus is at rest and is empty. Just as soon as they functionate their antagonism is apparent, that is quite fortunate for the science of anesthesia and the practice of obstetrics. Knowing this we can take advantage of the situation by relieving pain and shortening labor. Clinically I have arrived at this deduction and feel that I have established this fact of different innervation. As a result of this the technic that I have evolved simplifies itself into the following proposition, "Aid the expulsive efforts by taking away sensation and reducing resistance, which results in what I am pleased to term, a 'painless conscious childbirth.'"

The fundus and the cervix must be considered separately by the obstetrician and especially by the anesthetist as though they were different tissues if he is to localize his anesthetic influence, and be successful.

The uterus, being innervated from the inferior hypogastric plexus, the renal plexus of the sympathetic and the fourth sacral nerve, briefly, I take it that the fourth sacral influence is sensory and motor and that this is the innervation of the lower uterine segment mentioned before, the upper segment being involuntary and co-ordinate with the higher centers, and the cervix or lower uterine segment acting similar to the sphincter and in holding back the contents above until overcome by the co-ordinate powers above. And clinical experience has demonstrated it to my satisfaction.

There is a sharp line of demarcation between the functions of the cervix and the fundus in the gravid state. When conception has taken place the cervix is in a state of tonic contraction, and remains so for 280 days, during which time the fundus is relaxing and enlarging, opposite functions, hence opposite or different nerve control. The cervix mainly acting as a cork to an expanding flask. That this influence extends up to Bandl's ring is evidenced by contraction up to this point until the last month when lightening occurs, and the weight of the child overcomes the weaker contraction of the lower segment and allows the child's head or presenting part to occupy the true pelvis, down to the stronger contracting cervix, the pelvic floor also has increased its contracting tone, to the extent of supporting the increasing weight of the child. On the approach of labor a change takes place. There are two forces still opposing each other, though they are reversed this time. The powers of labor, represented by the intrinsic and co-ordinating contractions of the fundus, augmented by the voluntary abdominal muscles, and the weight of the child on the one side, and the resisting cervix and muscular tissues composing the birth canal below it, on the other side, opposing each other, as flexors and extensors do, or as the sphincter ani does. Now, clinically, I have been able to demonstrate that there is a sharp line of demarcation, especially in the gravid state, which must be due to a different nerve control; it is a mistake to consider the uterus as a whole, especially in childbirth. This seems to be the fundamental principle upon which I have been able to succeed with this method. Upon looking up the literature after clinical demonstration, the citations that I make substantiate this; although the line of demarcation and the segregation of fundus and cervix, in relation to anesthesia is original work, and also the technic. Upon this deduction one can understand how it would be possible to aid the dilation or relaxation of the cervix and floor of the pelvis, remove the pain sense and not interfere with the fundus and abdominal muscles, by localized nerve inhibition through spinal injection.

This is what I have been working for since my conception of the method. This I did on my first case on March 8, 1918. In our technic we are endeavoring to inhibit the afferent sensory impulses of the birth canal (at the time of labor) from reaching the brain, and obtain the immediate relaxation of the resisting parts involved. This can be successfully accomplished. Spinal anesthesia acts as an inhibitor to the sensory portion of the cord in small doses, in larger doses it inhibits motor activity, between these two points I have established my technic, combined with the peripheral influence determined by the point of injection. I use what I term the dry method, of dissolving crystals of tropococain, or novacain in the spinal fluid, and returning this toxic laden fluid to the spinal canal without appreciable loss of fluid. By working on a gravity principle, the analgesic effect can be moved up or down the cord as needed for the operative field.

In childbirth, what is the duty of the obstetrician? To make the birth as easy and painless as possible, without injury to mother or child.

How many of us are satisfied with our results in this respect? Where can we look for assistance, when the methods we are using are unsatisfactory? To the scientific and trained anesthetist of experience, who is an investigator, and whose business in life is to relieve pain by all the known methods of his art, who is making your problems his problems, and endeavoring to solve his part of it, so that you can depend upon him, and that you can be team-mates in relieving suffering humanity. Do we do this as much as we could or should, in justice to our patients, who frequently would be more than willing to stand some extra expense, if there was only **some** relief from their distress. The anesthetist should be a physician, as such he would understand obstetrics and be fully capable to co-operate with the obstetrician in every way. And before he attempted to give an anesthetic he should have a special course in anesthetics in a hospital with a diploma to that effect. Many surgeons are surrounding themselves with and depending upon incompetent people and assuming all the legal risk. Certainly a heavy burden It would be useless for an anesthetist to give an anesthetic and not have an operator. Then why should an obstetrician try to handle a case of pathological obstetrics, single handed, or ask another doctor to help him pull on the forceps, when relaxation of the parts is what he needs, and an obstetrically trained anesthetist could furnish that. And if an anesthetic was needed for relaxation and to obliterate pain, why not select an anesthetic that will do this but leave consciousness intact, which in addition would allow the woman to aid in her own delivery. This seems a much more normal procedure. Gentlemen and child-bearing women, there is much to commend in this method.

The medical profession is running more and more into specialties, and the science of anesthesia is an important branch, and the dispensing or applicating of poisonous drugs to or in the human body, should only be practiced by a licensed physician, for he examines the patient's heart and lungs, diagnoses the condition many times during the anesthesia and has the patient's life in his hands. (Patients dread the anesthetic more than the operation, they ask, "Will I feel it, or if I do not feel it, will I have to take so much anesthetic that I may not wake up again?")

If anesthesia was a recognized paying profession, (instead of a pick up anywhere, without reference to ability,) men of experience could afford to devote their whole time to it instead of making it a side issue only

in starting practice and then drop it. What surgeon would attempt to operate without anesthesia; why does the average obstetrician say, "I am waiting for nature to take its course" and allow a woman to suffer untold agony for the want of an anesthetist and more up-to-date methods and co-operation. Now this method is going to be used and in a few years how well it will sound to be able to say that I was one of the first to see its advantages and use it. This painless conscious method is going to be recognized, why not at home, or is a prophet not without honor save in his own country. I might not have used these last sentences if it were not for the general apathy and lack of interest in anything pertaining to anestheties. In fact, a man is almost considered a dub for following it. And yet there is nothing in such a conglomerate mess as the way the ordinary anesthetic is given here. Anything goes, nurses and even stenographers being called in. It throws all of the responsibility on the operator, what could he say in court in case of death, did he take ordinary precaution to conserve the life of the patient, I think not. We can not be too careful. There was a death in a tonsil case last week. In commenting on spinal analgesia, I will say that it has been used since its discovery by Corning in 1885, and like all things American, including "twilight sleep," the submarine and the flying machine, improved upon by the Germans and others, all trying to localize its effects. From the standpoint of possible injury, "Babcock reports the use of spinal injection in the same individual, eleven times within a few years without ill effects." Another report says a house officer used spinal injections every time he replaced a drainage tube, or seven injections in three weeks until he was stopped. I have used it repeatedly three times myself in about six weeks on the same case. I would not hesitate to give a second or third dose if I thought the case needed it. It can be used therapeutically in extreme abdominal pain, and has been known to cure velvulus unaided. Why should we not get better acquainted with this valuable pain annihilator?

In summarizing:—(1) Spinal injection is painless because the dilating tissues causing the pain have been disensitized by it.

(2) It is conscious because no general anesthetic has been given, the woman can talk to you and co-operate with you, and follow your directions.

(a) Consciousness:—When you give the mother a general anesthetic, both the mother and the baby are unconscious, and instruments have to be used, and the baby resuscitated.

(b) When "twilight sleep" is used, it also affects the baby through the mother's circulation and frequently the child is born without respiration or is asphyxiated from the morphine, and it has to be resuscitated or is dead. The method is long drawn out, dangerous, and needs constant supervision.

(c) Nitrous oxide, as is well known, is a poor relaxing agent, consequently an unsatisfactory dilator, it relieves the sharper pains, but in larger doses is a general anesthetic, it is pleasant to take, is spectacular for the patient, but ether frequently has to be added at the last for relaxation and forceps used.

(d) Then there is the old obstetrical stand-by of chloroform, the less used the better, also a circulatory anesthetic affecting the baby.

(e) And ether with its mucous also a circulatory anesthetic, all Caesarian sections under ether the baby has to be resuscitated.

All four of these methods leave much to be desired, all affecting the circulation. They are not much, if any, savers for either the doctor, nurse or patient. If given to the extent of obliterating all pain, they cause unconsciousness, anesthetize the child, cause addi-

tional care for the doctor and nurse, frequently vomiting and disturbed nutrition and distress for the patient to the extent that they all say, "never again for me" and may make an abortionist out of the woman.

In contrast to these conditions, what can we expect from this now "Painless Conscious Method?"

(3) Patient is not nauseated, does not vomit.

(4) No interference with nutrition. Patient can have cracked ice, or can eat or drink moderately, if she wishes and thus be refreshed.

(5) Even the injection causes very slight pain, if dextrously given, not as much as the way the average hypo is given in the arm.

(6) If the patient has had some severe pains before injection there is immediate relief after the injection, usually in a half minute. Then there is usually a resting stage of twenty minutes, maybe a little longer, and possibly no perceptible uterine contractions, but completion of the dilatation of the cervix and relaxation of the pelvic floor is progressing as the child is settling down into the birth canal. Then gradually uterine contractions return and increase in intensity, as the woman does not now inhibit them for the pain reflex which has been obliterated, does not now reach consciousness, and the child is soon born crying. The birth is not precipitate but stimulates a normal birth but without the pain discomfort. My first case, before mentioned, before I withdrew the needle from between the vertebrae said, "Why doctor, my pain is gone. Oh, such a relief." This case, while not a representative case for the method, was delivered with low forceps, a slight tear and a repair totalling thirty-five minutes, all without pain. It would have been several hours before she would have been exhausted and let it tear through the perineum, unless some other form of anesthetic had been given, I know that if she had been left say a half hour longer she would have delivered herself without pain after the injection, but none of us were sure of that at that time and the obstetrician was anxious to get away to another case, with the above result which was highly satisfactory to all concerned, and especially to me as it confirmed my ideas in several ways, and I was very happy.

(7) The relaxation is complete, and there are no tears due to pain contraction reducing the size of the outlet.

(8) Tears, if any, are due to the abnormality in size of the parts and would be inevitable with any method, but can be repaired at once without pain.

(9) If operative procedures are necessary such as sutures, breech extraction or version, there is full dilatation and relaxation and no pain sense to bother you.

(10) The baby is not affected at all, and cries at once, (a great relief to the doctor) is not cyanetic and does not have to be resuscitated.

(11) This is not a circulatory anesthetic, but a nerve inhibiter, there is no nerve connection between the mother's sensory nerves and any of the nerves of the child.

(12) There are less detrimental effects to the kidney by this method than any other, and in eclampsia cases spinal anesthesia lowers blood pressure and while the needle is in the spinal canal, you can relieve the pressure of the spinal fluid by removing 20 or 30 cc of fluid and reduce the pressure, and then inject the anesthetic, which acts in less than a minute, aids in dilation of the cervix, and allows you to empty the uterus quicker than by any other known method, which may save many precious minutes at this time and may save two lives. I especially recommend this feature to you in eclampsia cases.

(13) If you have obstetrical cases complicated with heart, lung or kidney pathology, such as influenza or pneumonia, spinal analgesia is the choice of anesthetics, because inspiration anesthesia, such as ether or chloroform is out of the question and even nitrous oxide could not be used, and as anesthesia can not be obtained with oxygen alone, you can conceive how important this method is in these cases and the profession is criminally negligent if they ignore it.

(14) I have had two cases of primiperas that delivered in two hours from the time of injection, by their own powers, without morphine or atropine to aid the anesthetic, or any pituitrin to aid the fundus in contracting.

(15) It is my opiuion that pituitrin can be given and that it will act synergistically, but as the spinal injection gets the relaxation and removes the opposition, a lesser number of contractions are necessary, and there is less uterine inertia, and less need for pituitrin. This is how it shortens the second stage.

(16) The mother is not so worn out and returns to her bed in excellent condition, with no after effects except return of sensation.

(17) The time of the second stage can, in some instances, be reduced three-fourths.

(18) The more pathological the case the more satisfactorily will spinal injection show up by comparison.

(19) There is the least amount of absorption of a poison in the system than by any other method or anesthetic it can be compared with, consequently the after effects are nil.

(20) As soon as this method becomes known by women generally and they understand the relief that they can obtain from it, they will be clamoring for it and you will have to use it to satisfy them. If some of you men could change places with the women you are waiting upon, you would reach for it with open arms, and say "anything to stop this suffering."

I have used it on the female genitalia many times for all the possible gynecological operations with success. The only failure is in poor technic. It is only recently that I have been able to satisfy myself as to the nerve routes that are involved so as to explain it comprehendingly to others, and this I hope I have done in a measure at least in this paper, while I have been satisfied clinically myself for over two years. And I hope it will be received by the profession here at once, so that no other section can have the credit of adopting it first as it is a Los Angeles production, and will put it on the map in obstetrics if we can offer **Painless Conscious Childbirth** in addition to climate, it will put Frieberg in the discard and we won't be able to keep the women away.

Painless Conscious Childbirth, by means of spinal injection, is the last word in up-to-date, easy, quick, safe obstetrics. A time saver to the man who does not relish midnight to daylight obstetrics, with a full day at the office ahead of him. Most men are shunning obstetrics on this account and something must be done along this line to enable those who are doing it to stay in it. This method is certainly most worthy of your serious attention in the interests of humanity, and the babies that are yet to be born, and for the comfort and relief of the women that are expected to bear them. I thank you.

1408 Fuller Avenue.

Dr. Victor Parkin of the medical staff of the Southern California Hospital at Patton, has been appointed as physician-in-chief of the psychopathic department of the Los Angeles County Hospital. Dr. Parkin graduated from the Hahnemin Medical College of the Pacific, class of 1912.

A STUDY IN INFLAMMATIONS AND ATROPHIES OF THE OPTIC NERVE.

BY CHARLES DARCY WRIGHT, M.D., CONSULTING OCULIST TO THE ALHAMBRA HOSPITAL, CORRESPONDING MEMBER TO THE HELMHOLTZ OPHTHALMOLOGICAL SOCIETY, ALHAMBRA, CALIFORNIA.

EMBRYOLOGY AND HISTOLOGY.

During the first month of fetal life an optical vesicle forms on either side of the forebrain. The lens bud, pressing from below and behind, invaginates this vesicle and forms the optic cup. The mesoblast, around the lens, grows into the invagination, and the accompanying artery becomes the central artery of the retina. This marks the upper limit of the invagination of the optic stalk. The optic fibers develop as processes of the neuroblast of the invaginated layer, and grow into the brain from the retina along the optic stalk. They form most of the fibers of the optic nerve The optic vesicle and the optic nerve represent the forebrain.

The essential elements of the retina are three: the sensory visual cell and two nerve cells, the bipolar cell, and the multipolar or ganglion cell.

The visual cell is made up of two parts: externally, either a rod or a cone; internally, a cell body with a nucleus. The rod is a long cylinder with a free end and continuous with the cell body. The cell body is fine, with centrally striated nuclei, ending in a spherical knob.

The cone is transversely striated, shorter than the rod, nucleated, and ends in a pedestal.

The bipolar cells are arranged perpendicularly to the surface of the retina. Their processes (single or branched) anastomose with a rod or cone, or both. Their cylinder axes anastomose with the multipolar cells. Those cells which connect with the cones anastomose with the dendrites of the multipolar cells; while those of the rods anastomose with the cell body itself.

The multipolar, or ganglionic cells, form a single layer, and their dendrites and cell bodies anastomose with the bipolar cells. Their axis cylinder processes varicose, are very fine (without myelin sheath or sheath of Schwann), and form one of the fibers of the optic nerve.

The bipolar cells correspond to the cells of the spinal ganglia. The multipolar cells represent a central sensory nerve cell. The sense of sight is thus arranged in one thin membrane.

The two limiting membranes are formed by the spread-out ends of the fibers of Muller, which are placed between the retinal elements, which they support. They are epiblastic connective tissue or neuroglia Several sensory cells articulate with one bipolar cell, while several bipolar cells enter into connection with a single ganglion cell.

ANATOMY.

At the fovea centralis, or yellow spot, a depression shows in the surface of the retina about 2 millimeters in diameter. At its edge, the retina is thickest, about 350 microns thick, while the center is 100 microns thick. Here the cones are long and narrow, and the rods are absent. The two reticulate layers disappear at the fovea, and only the nucleated cones, inner nuclear, and pigment layer exist. Hence light falling on the fovea falls directly on the cones. The multipolar cell is also next to a single bipolar cell which itself anastomoses with a single cone, therefore there is no diffusion of visual impressions. At the disc the retinal layers appear beveled off at the internal side. They all appear at once on the external side. This is responsible for the phenomenon occurring in neuritis and optic atrophy as we shall see further on. At the ora serrata the rods diminish and

cones next disappear, rapidly followed by a disappearance of the other layers. The fibers of Muller are much developed.

The peripheral visual tract consists of the retina, the optic nerve, the chiasm, and the optic tract.

The primary optic centers are the external geniculate body, the pulvinar of the optic thalamus, and the anterior corpus quadrigeminum. The optic fibers occupy a constant position in their course through the peripheral visual path. Lesions of the optic paths in general produce as follows:

Lesions of the optic nerve produce homolateral amaurosis and homolateral direct pupillary reaction; contralateral of consensual pupillary reaction.

Lesions of the median part of the chiasm produce bitemporal hemianopsias.

Lesions of the optic tract produces hemianopsias, macular disturbances, hemianopic iridoplegia, ipsolateral ptosis.

Lesions of the ventral or dorsal part of the geniculate body produce quadrant hemianopsia.

The optic nerve penetrates the choroid and sclera, forming thereby the intrascleral or orbital portion. The external laminae of the sclera are reflected back upon the exterior sheath of the nerve. The innermost lamina crosses the scleral foramen, and is perforated by openings for the passage of the funiculi of the optic nerve. A few fibrous bands of the choroid cross the scleral foramen. Within the scleral foramen the optic nerve is traversed by numerous sectors of connective tissue called the "lamina cribrosa." The scleral foramen is not as large as the optic nerve. In order to enter it, the optic nerve sheds the medulla of its nerve fibers, and changes in color from a pearly white to a translucent gray, and is so seen when viewing the optic disc.

Surrounding the optic nerve the intervaginal spaces, situated on either side of the arachnoid sheath, are filled with lymph. The outer boundaries of these spaces are formed by the dural and pial sheaths, and the spaces are known, respectively, as the subdural and subarachnoid spaces. The supervaginal space lies between the capsule of Tenon and the dural sheath. The intervaginal spaces communicate posteriorly with the subdural spaces of the brain. These spaces are divided by bands of connective tissue and lined by endothelial cells.

INFLAMMATION AND EDEMA OF THE OCULAR DIVISION OF THE OPTIC NERVE.

Papillo-edema, palillitis, and optic atrophy are only symptoms of disease, not diseases in themselves. Diagnosis of pathologic conditions often is first made by inspection of the optic nerve and its termination.

Papillo-edema is an edema of the non-medullated portion of the palilla from pressure. The laminae bulge, and the edema first shows on the external side of the disc, where we have seen all layers of the retina appear at once. There is proliferation of the neuroglia. The medullated portion of the fibers later shows degeneration. Distention of the nerve sheaths is common, the subarachnoid space being the one most generally affected. The edema of the nerve is usually interfascicular. The edema extends into the nerve fiber layer of the retina.

In papillo-edema inflammatory symptoms are limited more to the papilla, while the orbital nerve may be normal. The papilla is greatly swollen by accumulation of lymph and blood, and it projects out into the interior of the eye—mushroom-like—is thickened at its base, and gives actual tumefaction. The retina is pushed aside by the gorged optic nerve, extracasations of blood are found, also swelling of the nerve fibers and cellular infiltration

along the blood vessels. Connective tissue is formed in the papilla, due to the organization of the exudate. It is, however, by the consequent shrinking of the connective tissue that the fibers of the optic nerve are rendered atrophic (neuritic atrophy). We have then finally a papilla composed of a network of connective-tissue bands and thickened blood vessels.

PAPILLITIS.

There is a perivascular infiltration of leucocytes around the vessels. The arteries are small, and the veins dilated and contorted from engorgements. The connective tissue around the vessels proliferates, and the adventitia becomes thickened. The physiological cup fills up. Interstitial infiltration of the nerve cup is marked. There is increase in the neuroglia and interstitial connective tissue.

THE SUBJECTIVE SYMPTOMS OF INTRA-OCULAR NEURITIS.

The subjective symptoms of intra-ocular neuritis are greater or less disturbances of vision, increasing so that in severe cases complete blindness is present during the inflammatory stage. A quite characteristic symptom is flitting blindness, repeated many times a day. Often persons so affected see well after a night's rest, but very poorly in the afternoon. (These are generally cases from nutritional diseases where the heart action is better in the morning). Enlargement of the blind spot, contraction of the field of vision, sometimes hemianopic, are often found.

The subjective symptoms of intra-ocular neuritis may be confounded with hysterical phenomena and lesions of the visual-path fibers in the occipital lobe. Hysteria is easily eliminated. Occipital lesions occur generally with arterial change or from trauma. Arterial lesions of visualpath fibers of the occipital lobe usually occur with age.

In acute anemia following extreme hemorrhage, papillitis occurs with rapid and permanent loss of vision.

Under diseases of nutrition the most common causes of neuritis are albuminuria, diabetes, tuberculosis, anemias, poisoning from lead, wood alcohol, iodine, arsenic, phosphorus, and so forth; intestinal toxemias and menstrual, lacteal, and gestational malnutritions. In the latter three, the prognosis is good.

When papillitis occurs with amenorrhea, the prognosis is bad, as the underlying cause is usually serious diseases, as brain tumor or tuberculosis. The contraction in the field of vision in papillitis often appears under the form of hemianopia. In some cases there is a marked enlargement of the blind spot. The symptoms of intra-ocular neuritis and intra-orbital neuritis must, per se, many times overlap. The neuritic inflammations run a chronic course, even into the months, before the atrophic stage begins.

INFLAMMATIONS OF THE ORBITAL DIVISION OF THE OPTIC NERVE.

Inflammation of the orbital division of the optic nerve may show no change whatever in the papilla. At all times the changes are insignificant until after the disease has subsided, when the signs of atrophy appear, if the neuritis has been sufficient. Destruction of the optic fibers has taken place where the focus of inflammation existed. This is slowly transmitted to the papilla, where it is visible with the ophthalmoscope. (Descending atrophy.) Owing to the lack of visible change of the disc in this form of retrobulbar neuritis, diagnosis must be made early, often mainly on the subjective symptoms. In many cases the vision is very little disturbed, but in some cases may reach the point of complete blindness. These cases are few and are confined to those where all nerve fibers are affected. In many cases the papillomuscular bundle of

fibers only is affected, and there is a central scotoma in the field of vision. This scotoma differs from the scotoma produced by the inflammation of the choroid and retina in that there is no change in the apparent shape and size of objects in or about the scotoma; and the first colors to disappear are red and green. In primary disease of the macula, there is retinal metamorphosia. In lesions of the perceptive elements, i.e., the rods and cones, as in retinitis pigmentosa, choroiditis, etc., the scotoma is differentiated from papillomuscular bundle scotoma by the fact that blue disappears first in scotoma from disease of the rods and cones, and metamorphopsia usually is complained of, while in the latter scotoma red and green first go—an important differentiation.

SUBJECTIVE SYMPTOMS OF ACUTE ORBITAL NEURITIS.

The acute form is characterized by the suddenness of the disturbance of vision. Sight may be abolished in a few days, and the eye may look normal externally, except that the pupils are dilated in proportion to the blindness. The ophthalmoscope may show some distention of the retinal vessels, and sometimes an ischemia, which is caused by pressure on the central artery. There is generally dull pain in the orbit, and the eyeball is sensitive to touch and pressure. Acute retrobulbar neuritis may be the result of inflammation of the surrounding orbital tissue, or may be an endothelionic inflammation of the nerve. Violent cold, influenza, diseases of the accessory sinuses, especially of the ethmoid cells, the teeth, and the tonsils are contributing causes; also the diseases noted as causes of intra-ocular neuritis. Exophthalmos often aids in the diagnosis when the disc shows little change, as does paralysis of the eye muscles which lie close to the inner wall of the orbit, namely, internal superior rectus, superior oblique or levator palpebrae. Retrobulbar neuritis may come from disseminating sclerosis where it is generally an early symptom, from acute infectious diseases, toxic conditions, disturbances of menstruation, tuberculosis, and heredity. The cases due to nasal affections subside generally before they become very serious, and vision returns, but central scotoma often remains. In rare cases, even in slight attacks, all the nerve fibers are affected, and permanent blindness results from the consequent atrophy. So one must be guarded in each prognosis. Recurrence is sometimes observed after many years.

OPTIC ATROPHY AND ATROPHY OF THE PAPILLO-MUSCULAR BUNDLE OF FIBERS.

It is often difficult to diagnose between optic atrophy and diseases of the papillomuscular bundle of fibers. There is progressive loss of vision with only a little pallor of the disc in both cases. The pallor usually shows on the temporal side. In atrophy there is at the commencement contraction of the periphery of the field, and no central scotoma. In disease of the papillomuscular bundle of fibers, the field will not contract at first at the periphery and there will be a central scotoma.

Oxycephaly gives increased pallor of disc from the bone growth pressure.

Simple atrophy generally comes from tabes, general paresis, multiple sclerosis, syphilis, and diseases of the hypophyses (hypophyseal tumor) with acromegaly, congenital spastic paralysis, or Little's disease of the cord.

Some cases of retinitis pigmentosa resemble optic atrophy somewhat. These are misleading when the rare form occurs where the pigment does not cover the artery. In these cases the history of consanguineous marriage of parents, the yellow color of the disc and the fine vessels lead us to a correct diagnosis of the choroidal disturbance is also observed. Optic atrophy may occur with

syphilis as one of the secondary symptoms, or it may come on later as a complication of brain lues. Some question has arisen as to whether blindness occurring after the exhibition of salvarsan was due to the salvarsan or not. The salvarsan liberates a spirochaetae rapidly, and they and their toxins produce blindness. When mercury has first been given, the excitation from the salvarsan is not sufficient to produce blindness.

Tabetic atrophy begins in the ganglionic cells of the retina. The color field is contracted first for green. White field contraction soon follow. Blindness generally results in from two to three years. The contraction is centric or in sectors. There is always peripheral contraction first; never scotoma nor true hemianopsia. The contraction of the temporal side of both fields sometimes stimulates hemianopsia. The pupil aids us in diagnosing optic atrophy that comes from general paresis, cerebral syphilis, multiple sclerosis, and tabes. When the pupils are dilated and there is anisocoria, and no reaction to light or convergence, the optic atrophy is from general paresis.

Cerebral syphilis is often accompanied with optic atrophy and internal ophthalmoplegias, bilateral ptosis, and hemianopsia. In cerebral syphilis the optic symptom is generally bilateral, for some time at least.

Optic atrophy from multiple sclerosis is often accompanied with nystagmus, ephemeral paresis of the ocular muscles, and paresis of the associated muscles. In tabes the optic atrophy is usually bilateral at first, generally accompanied by the Argyll-Robinson pupil. The loss of the patellar reflex with optic atrophy and the Argyll-Robinson syndrome constitute ground for diagnosis of tabes.

Idiopathic optic atrophy may occur, or, to put it more properly, the cause may remain undiscovered. Congenital optic neuritis, known as Leber's disease, shows atavistic reappearance usually, and it is often accompanied by epilepsy. The disc is red, the margins much blurred (if discernible at all), and the vessels slightly engorged and somewhat tortuous. These changes may be physiologic and found in high degrees of hyperopia Colloid excrescences often show as yellow spots at the margin of the disc in the hyperopic cases.

In complete simple atrophy the disc shows white or bluish-white. No new fibrous tissue, no new interstitial infiltration, no new growth of neuroglia, the vessels from Zinn's plexus disappear, but the other papillary vessels are not much altered as to size, there may be peri or endo-vasculitis. As the nerve fibers disappear, the sectors and neuroglia look larger by comparison, the pial sheath is thickened, and the dural sheath shrinks. The nerve shrinks from the sclera. Small gray spots mark the remnants of the meshes of the lamina cribrosa.

In complete secondary atrophy the disc shows gray, blue, or greenish-white, and is smooth and opaque. The sectors are thickened, the nerve fibers have disappeared, there is much proliferation of neuroglia, and new fibrous tissue is seen in the physiological cup. The margin of the nerve is irregular and slightly blurred. The vessels are small.

Intradural tumors of the orbital portion of the nerve given an exophthalmos from pressure in the sheath. They may give primary atrophy or optic neuritis with secondary atrophy. They are generally sarcoma, and in this region grow slowly. Extradural tumors are usually endothelioma. Exophthalmos is usually present in contradistinction to the intradural tumors that generally give no exophthalmos, but generally give papillo-edema from pressure on the lymph spaces. Inflammation of the optic nerve starts from its connective-tissue portions. Cellular exudate is formed in perineuritis. Within the trunk of the

nerve the inflammation attacks the sectors, and the neuclei multiply (interstitial neuritis).

CUPS AND CIRCULATION—EXCAVATIONS OF THE DISC AND ARTERIAL TORTUOSITY.

The papilla is normally white, and the white spot that marks the location of the excavation is circled by a pink zone, which defines the physiological cup. This may be small or large, shallow or deep, abrupt or gradual in its recession.

The atrophic excavation often recedes gently, and in this matter much resembles the physiological cup. In such cases differentiation may be made by the color of the disc, which in atrophy is abnormally white, grey, or blue. The glaucomatous cup has precipitate walls with similar color to the atrophic cup. Some physiological cups touch nearly the whole margin of the disc, and to the tyro there is difficulty in differentiating the three. We must rely on the color and the manner of recession. The vessels of the fundus hook over the edge of the cup in glaucomatous excavation. In case of late glaucomatous cup the halo will not deceive us by its color, because we have already noted the advanced stage of the disease from other unmistakable symptoms. The glaucomatous halo is never present until the disease is well established. Coloboma of the optic sheath may have precipitate marginal cupping. But the papilla is so much larger and the other symptoms of glaucoma are so wanting that there is no excuse for mistake.

In the normal fundus arteries never cross arteries, veins never cross veins. Tortuosity of the vessels is often physiological, as well as pathological. Physiological tortuosity is generally bilateral, and the tortuosity is on the same plane as the retina, except in the very rare case of twisted cord of the hyaloid artery, which may persist in the papilla.

Pathological tortuosity is often unilateral, and the tortuosities are anteroposterior, as well as on the same plane as the retina.

We see the blood in the vessels of the fundus, not the vessel sheath. Sometimes in normal eyes we often see white or pale-yellow streaks along the sides of the blood columns, often in the papilla, more rarely in the retina. The chorioretinal vessels, running from the papilla to the retina, are normal; they are from Zinn's vascular plexus, and not from the central artery. These sometimes furnish enough nourishment to preserve a small amount of vision when the circulation in the central artery has been entirely shut off.

Venous pulse is normal in the eyes of the young, and may be produced by a pressure on the eyeball after youth has gone. In partial or complete occlusion of the central vein such pulse cannot be so produced.

Arterial pulse always means imbalance, in the relation of systemic and the intra-ocular blood pressure. It may occur in glaucoma, arterial sclerosis, and all diseases producing a high blood pressure.

Bright rings or lines that change with the motion of the head or mirror are light reflections. They are often seen in the fundus of young people. Shadow rings exist in posterior staphyloma of myopia.

THE INTRACRANIAL PORTION.

Lesions of the optic tract produce homonomous hemianopsia and positive hemiopic pupillary reactions. Generally these lesions come from hemorrhage, softening, tumor, or lues. Owing to the small size of the tract, hemorrhage seldom occurs in it. Hemianopic defects are usual in meningitis. Syphilis has a predilection for the optic tracts, next, probably, to the chiasm. Visual defects vary. Optic atrophy may result without papillitis. The ocular and fifth nerves may be affected.

A central ganglia lesion produces no alteration of the visual field, though it may affect the pupil. There are no optic fibers in the pulvinar nor in the anterior corpora quadrigemina.

Disturbances of the function of the external geniculate body produce disturbances of the field. The external geniculate body is so small that pathological processes seldom are limited to it alone, but invade the neighboring structures. The auditory tract passes from the posterior quadrigeminal body through the external geniculate body to the temporal lobe. The sensory tract passes through the posterior segment of the internal capsule from the leminiscus to the posterior central convolutions. (Farther away are the nuclei of the ocular nerves and the middle division of the internal capsule, which contains the motor tract.) Hemorrhages are frequent in the internal capsule. This explains hemiplegias, which are accompanied by hemianopsias. When they compress the geniculate body fully, complete hemianopsias result. Tumors of the central ganglia may press on the geniculate body or the tract and produce hemianopsias. The thalamus may be destroyed without causing a visual disturbance.

A lesion only in the lateral part of the occipital medulla can cause homonomous hemianopsia or scotomata without hemiopic pupillary reaction. Hemianopsia may be produced by injuries of the parietal region; the most dorsal of the visual fibers attain the height of the lower portion of the angular gyrus. Lesions here are wounds, hemorrhages, softening, abscesses, and most often tumors. A common and important lesion here is temporal abscess from optic origin. It involves the optic paths, and produces homonomous hemianopsia with disturbances of speech, if it be on the left side, and through distant action produces disturbances; hemiplegia, paralysis of any or all of the third nerve, and dilated pupil, as well as palillo-edema—no hemiopic pupil reaction.

Hemianopsia does not occur in affections of the meninges with optic transfer of unicellular micro-organisms. This is of great importance as a diagnostic symptom. Lesions of the posterior cerebral arteries cause softening of the optic path in the temporal lobe. It is difficult (when the lesion is in the right hemisphere), if from the presence of homonomous hemianopsia a process in the occipital neuron of the optic tract is suspected, to determine whether the medulla of the parietotemporal lobe or the occipital lobe is affected, as the right parietal and temporal lobes do not possess characteristic functions. A lesion of the internal capsule shows as hemiplegia with hemi-anesthesia. Central deafness or an otitic process speaks for the central lobe. If the process is on the left side aphasia is a symptom. It is possible to differentiate processes in the parietal lobe from softenings in the occipitotemporal lobe; the former giving quadrant hemianopsia downward, and the latter quadrant hemianopsia upward. Tumors occur in the parietal lobe, and abscesses are usually otitic in origin and are situated in the temporal lobe. Hemorrhages occur in any position of the optic paths.

Visual path fibers in the occipital medulla are spread out, hence lesions here may be quite extensive and affect a small number of visual fibers only. The result is defects in the field quadrantic, sectorial, or even small scotomata. The disturbance is always hemianopic. Disturbances in the occipital lobe are often circulatory. They are protean. Scintillating scotoma with attacks of migraine, clouds which remain for some minutes in the field vision, flashes of light and homonomous defects in the visual field, transitory hemianopsia, are the most prominent. Hallucinations confirm the diagnosis.

In uremia sudden blindness is due to disturbances of circulation in the

occipital lobe. The occipital lobe, ipso facto, frequently suffers from trauma.

Abscesses in this region may be otitic, metastatic or traumatic; visual disturbances are usually homonomous, bilateral hemianopsia, and macular defects.

Trauma from fracture in this region usually produces unconsciousness and temporary blindness. The vision usually clears up, leaving scotoma.

Primary tumors very often originate in the parietal lobe. They press downward and encroach on the dorsal visual fibers, producing hemiopic defects. Pressure, papillo-edema, is often present.

Tumors, which start in the cortex, produce at the beginning color and figure hallucinations. Vascular changes and thrombosis often result in softening in one or both of the occipital lobes. If in one lobe and the lateral part is affected, there may be no visual disturbance. If the tract or the visual cortex is involved, homonomous complete hemianopsia, quadrant hemianopsia, or multiple scotomata result.

When both mesial cortical surfaces are involved from a thrombosis of both posterior cerebral arteries, bilateral homonomous hemianopsia results. It may not be complete, often varying in size and shape.

When the entire visual cortex has been completely destroyed, persistent blindness results generally, though occasionally the macular field clears up. Color blindness often persists if the macular field clears.

These cases of bilateral blindness often have visual hallucinations. They are not conscious of their blindness. Their optical memory is preserved. Whether a part of the field of vision remains or is all destroyed the subjective symptoms are the same. The patient at this stage has lost the sense of orientation and color.

Intracranial portions of the optic nerve and tracts may be disturbed by various diseases or by trauma; meningitis, aneurysm, arterial sclerosis, lues, tumors of the brain, and apophyseal growths.

Sclerosed vessels at the lateral angle of the chiasm by a pressure on the underlying nerve fibers may produce bilateral hemianopsia. Aneurysm may divide the chiasm and produce bitemporal hemianopsia.

Invasion of the brain by unicellular micro-organisms from infectious diseases produces acute cerebrospinal or acute purulent meningitis and disturbed vision through optic neuritis by involvement of the cortex or chiasm.

Basal meningitis is prone to give choked disc, paresis of ocular muscles, and iridoplegia. Hemianopsia with acute meningitis points to brain abscess. In post-mortem findings exudates about the chiasm are frequent where there has been secondary atrophy. Serous meningitis gives brain hydrops (hydrops nervi optici). Pressure on the hypophysis or chiams often gives symptoms of hypopituitarism from severe distension of the third ventricile. Even extrinsic growth may give the same symptoms.

Syphilis shows a predilection for the chiasm (chronic vascular meningitis). Generally, however, the chorioretinitis with the optic lesion points to the cause, and with these cases a history of previous flitting paralysis of the third, fourth, and even sixth nerve is given. These paralyses often antedate the optic lesion many years. The changes in the field are various and complex, especially when the optic nerve and tract are affected in addition to the chiasm; there may be a relative scotoma, monocular-temporal hemianopsia, bitemporal hemianopsia, temporal hemianopsia with blindness in one eye, blindness in one eye with nasal hemianopsia of the other, or blindness in both eyes, which only very exceptionally remains permanent. Cerebral syphilis or chiasmal syphilis shows va-

riations of vision, reaching to complete blindness. It is very important for a differentiation of diagnosis from tabes and paresis, where the loss of vision continues steady and is final. Intensive treatment used with chiasmal syphilitic blindness restores vision; hence, if in doubt, always use intensive treatment. In chiasmal syphilis there are generally intense headache, vomiting after excitement, and stupor, but insomnia also. Diabetes is often present. In brain lesions involving the cavernous sinus there occur (on account of the latter's proximity to the sphenomaxillary sinus) ptosis, dilated pupil, suspension of accommodation, and convergent squint. These lesions are generally unilateral.

THE PUPIL.

This study would be incomplete without a word on differential diagnosis of pupil conditions that occur with diseases that accompany optic nerve change. When the pupils are unequal it is necessary first to designate which is the "normal" pupil. This is a simple procedure. Measure the pupils and drop one drop of a 5 per cent solution of cocaine in each eye. Now when a drop of a 5 per cent solution of cocaine is placed in an eye, one of three things occurs: either there is no dilation, or a very excessive dilation, or a normal (medium) dilation.

When the instillation is followed by a normal dilation, that pupil is normal; in anioscoria one will show either no dilation or excessive dilation and that is pathologic.

The following formulae for pupil diagnosis are useful:

If the large pupil (+5% solution of cocaine) shows no dilation there is excitation of the dilator fiber.

If the large pupil (+5% solution of cocaine) shows very great dilation there is paresis of the third nerve.

If the large pupil (+5% solution of cocaine) shows normal dilation this pupil is normal.

If the small pupil (+5% solution of cocaine) shows no dilation there is paralysis of the dilator fibers.

If the small pupil (+5% solution of cocaine) shows mild dilation it is normal.

If the small pupil (+5% solution of cocaine) shows no dilation use a 1% atropine solution, and if no dilation there is paralysis of the sympathetic, as in tabes.

If adrenalin solution produces mydriasis in myosis there is a lesion of the sympathetic nerve.

Both pupils may be absolutely paretic to light and accommodation. This points to cerebral lues rather than to tabes or progressive paralysis, where the reflex iridoplegias are more common.

Convergence often shows some pupillary reaction, to the careful observer, where there is marked myosis.

REFERENCES.

Addison, Thos.
Charcot: v. 1, p. 63
Gray, L. E.: v. 1.
Osler, Wm.: P. Sy. M.
MacEwen, Wm. A.: S. Sy. J.
Tooth, Howard: 1 c.
Von Dusch.: 1 c.
Adams, F. H.: v. 1.
White, L. E.: Am. J. Med., v. 74, No. 22.
Keating, Wm.: A. Sy. J. V. L. pg. 936.
Roberts, J. B.: 12 p., il. O.
Sutton: 1 c.
Boswith, S. H.: pg. 378.
Hutchinson, Jonathan: 1 c.
Knap, Avnold: v. 1.
Hyde, J. N.: 1 c.
Neisen, A.: 1 c.
Otis, F. N.: N. Y. N. P., pg. 986.
Fuchs, E.: Aug. K., v. 1.
Bromwell, Byron: v. 9. 1., pg. 827.
Dalton, J. C.: v. 1.
Solly, A. A.: Sec. 1, v. 2, pg. 99.
Spitzka, V. V.: p. 9133.

WILLIAM CHESELDEN—ENGLISH SURGEON.

BY EDWARD WAKEFIELD.

The origin of the high operation for stone in the bladder is recorded in the Nineteenth Century for August, 1920. Here is an interesting sketch of Dr. William Cheselden, 1688-1752, believing that every medical man should know to whom we are indebted for the progress in surgery, we quote as follows:

"If arms and music are worthily represented in this humble Valhalla, so, in an eminent degree, is surgery. At the east end, on the south side, close to the pavement opposite the Guard's Barracks of the burial ground of the Royal Hospital, Chelsea, stands a stately monument having on its two chief panels this inscription as clearly carved as if it had been put there yesterday:

"Gulielmus Cheselden, Armigeri
Natus 19 Octobris An. Dom. 1688
Obiit 10 Aprilis 1752."

Nothing here to indicate that a great man lies below. Yet that word Armigeri, "Esquire" was a proud distinction for the widow to add to her husband's name; for it was he who closed the ignoble connection between barber and surgeon and first gave surgery the dignity of a learned profession, claiming and obtaining the highest social respect. If he had lived in our time, he would certainly have been raised to the peerage with Lister; if in ancient days, he would have been defied with Aesculapius.

William Cheselden was one of those rare beings who cannot be accounted for except by the inspiration of genius. Born of poor parents in a Leicestershire village in the year of the Glorious Revolution, he had no advantages or opportunities of any kind. When a mere child he went as a drudge to a local apothecary, and suffered all the cruel discouragements of such a situation. He slept under the counter in the shop, swept the floors and cleaned the boots, washed bottles, scoured gallipots, carried round for miles, rain or shine, the nostrums he had helped to pound in a mortar with a pestle he could hardly lift, shared the scraps from the kitchen with the watch dog, and had many a beating to him his place and stop getting uppish. It reminds one of Dickens in the blacking factory. All the while, nevertheless, the light that was in him was awakening him to the possession of almost supernatural gifts. At length, as if impelled by fate, he fled to London and offered himself as a pupil to Cowper, a very distinguished surgeon, who instantly saw what stuff the uncouth country boy was made of, and befriended him. In 1703, at the age of fifteen, Cheselden, with Cowper's help, was apprenticed to Ferne, surgeon to St. Thomas' Hospital and thenceforward his career lay open. He soon outstripped his master, both in learning and in skill, and on the expiry of his articles, when just twenty-one, he was appointed to the staff of the hospital as lecturer on anatomy. This post, which he held for twenty years, he raised to unwonted importance by his thoroughgoing methods of teaching. He divided his course into thirty-five lectures, founded on a wonderfully exhaustive and accurate book, which he published out of his savings for the use of his students, called Index Humani Corporis partium anatomicus. These thirty-five lectures aided by Index, he repeated four times a year; so that every student who went the annual round faithfully came out of it with a sound knowledge of anatomy. In 1713, when still only twenty-five, he enlarged the Index into the magnificent (Anatomy of the Human Body) illustrated by fifty-two full page col-

ored plates and innumerable drawings and diagrams, all by his own hand, which have never been surpassed or superseded. This mighty work, though it nearly ruined him by its lavish cost before he got it out, made his fortune and brought him undying fame. It ran through thirteen editions in as many years, and the most unfavorable comment ever passed on it is that it is too concise. Cheselden had, in fact, a singular literary style,—the style of a brain as keen and unerring as a lancet, doing the work of ten ordinary brains at a time. He never made allowance for indolence or dullness in his readers, but always put the essential thoughts, and no more, in the essential words, and no more. In 1719, while still retaining his chair of anatomy, he was appointed surgeon to St. Thomas'. From this commanding position he at once determined to take the most perilous step for his peace of mind that any great surgeon at that time could take.

Stone in the bladder was then one of the commonest and least understood of maladies, and in strictly scientific circles was considered incurable. There was a roughly scientific operation for it, but so dangerous that only two patients out of a hundred survived it. For that very reason stone was the Tom Tiddler's ground of quacks who practiced shamelessly on the fears and credulity of their dupes, multitudes of whom were robbed of their money and tortured to death, without the slightest chance of relief.

Cheselden, however, had already found out the right way of dealing with terrible affliction, a way equally simple and scientific, and in 1722 he gave it to the world in his Treatise on the High Operation for the Stone. Instantly, he became the objective of the most virulent and unscrupulous attacks that were ever levelled against a discoverer. His own profession deserted him; his own pupils rebelled; while the public were aroused to such fury, on account of the supposed cruelty and wickedness of his method, that for five years he got no chance to carry his theory into practice. In 1727, nevertheless, he boldly performed the "High Operation" on a desperately bad case at St. Thomas' with perfectly satisfactory results; and literally at one stroke he reduced the percentage of fatalities from 98 to 6. The aggregate of suffering that he spared humanity passes all conception. His countrymen hastened to repair the wrong they had done him. The court smiled upon him, and he was appointed Sergeant-Surgeon to Queen Charlotte. Before long his theater was crowded with eminent surgeons from every continental school, who sat in silent amazement at him coolly working what seemed miracles. It was certainly enough to make them open their eyes. The old operation took two hours, and the patient nearly always died before it was over, or very soon after. The few, who by reason of their strength, were able to bear it, were wrecks for life. Cheselden's regular time, from start to finish, was fifty-four seconds, and the healing of a clean cut was the only after-effect. He never failed unless the general state of health made recovery from any sort of wound hopeless; and this was half a century before chloroform or carbolic was dreamt of. The demand on his skill became so pressing that he fixed his fee for the rich at 500l., and actually received 40,000l., from this source alone; but to the poor he was ever cheerful to give it without price; and the Lord loved him accordingly, for he was one of the happiest of men. To ophthalmic surgery he rendered immortal services, and the greatest joy he ever experienced, he declared in his delightful fantasy, Psychology of Vision, came in 1728, at the moment when he gave sight to a boy of sixteen who had been blind

from birth. Upon the deaf he imposed a debt of gratitude, equally beyond redemption, though here again he came into conflict with prejudice, so fierce and unreasoning that his attendance on the Queen was dispensed with in response to popular clamor. He relates the incident himself in his great work on the ear, with quiet humor, but without a trace of irritation or regret. His last grand effort was the production in 1735 of Osteographia, or the Anatomy of the Bones, which would alone have sufficed to make any man world famous.

Cheselden was now fifty-seven, and his varied activities were beginning to tell on him; for surgery was not his only field of achievement. His natural bent was towards mechanics, and as an engineer he was far in advance of his time. Bridge-making was his special hobby, his masterpiece in this branch of applied science being the picturesque wooden bridge over the Thames at Putney, which served its purpose admirably for one hundred and twenty years and might have done so still, in the belief of many well qualified to judge. He was also an enthusiastic and open-handed patron of athletic sports, especially the manly art of self-defense, and was seldom absent from any important prizefight. It was this peculiar taste that eventually brought him to Chelsea, for in 1737 Sir Robert Walpole, who cared nothing about science, but dearly loved a sportsman, hearing he was leaving St. Thomas' on account of failing health, gave him the post of surgeon to the Royal Hospital. This was intended for an honorable retirement, but for the seventeen remaining years of his life, Cheselden enjoyed the reward of his early labors in a large and lucrative practice among the wealthy classes. He was an intimate friend of Pope, who sang his praises in the "Imitations of Horace," of Swift and Stella, who had a nickname for him in their cryptic correspondence, of Sir Hans Sloane, immortalized in Chelsea nomenclature, who lies within half a mile of him under the shadow of the old parish church, and of Sir Isaac Newton, whom he enabled by his devoted care, to work serenely on almost to the last day of his eighty-five years, and who died in his arms without pain at last. From his boyhood until his death he supported his parents with affectionate generosity, and the only money he ever saved out of his princely income was a provision for their benefit and his widow's annuity. He was a sweet, true man, without guile or bile, to whom work was a prayer and thanksgiving in one, who never owed a penny and was never known to be out of temper with man or beast.

TUBERCULOSIS RESEARCH FELLOWSHIP

University of Minnesota

To encourage study of the means for the prevention and cure of tuberculosis, the Hennepin County Tuberculosis Association of Minneapolis, Minn., announces that it has set aside a fund for the support of a tuberculosis research fellowship in the Graduate School of the University of Minnesota. The candidate for the fellowship must be a graduate of a Class A medical college. He will be expected to devote himself to research in some problem concerned with the causes, prevention, or cure of tuberculosis. No teaching or other service will be required. The fellowship yields $750 the first year and progressively increasing amounts to be appropriated for the second and third years as conditions warrant. Inquiries and requests for application blanks should be addressed to the Dean of the Graduate College, University of Minnesota, Minneapolis, Minn.

SOUTHERN CALIFORNIA PRACTITIONER.

A MEDICAL, CLIMATOLOGICAL AND SOCIOLOGICAL MONTHLY MAGAZINE.
This journal endeavors to mirror the progress of the profession of California and Arizona.

Established in 1886 by Walter Lindley, M.D., LL.D.
DR. GEORGE E. MALSBARY, Editor and Publisher.

Associate Editors,
Dr. Walter Lindley, Dr. W. W. Watkins, Dr. Ross Moore, Dr. George L. Cole, Dr. Cecil E. Reynolds, Dr. William A. Edwards, Dr. Andrew W. Morton, Dr. H. D'Arcy Power, Dr. B. J. O'Neill, Dr. C. G. Stivers, Dr. Olga McNeile, Dr. W. H. Dudley, Dr. J. M. Mathews.

Address all communications and manuscripts to
EDITOR SOUTHERN CALIFORNIA PRACTITIONER,
Suubscription Price, per annum, $1.00. 1414 South Hope Street, Los Angeles, Cal.

EDITORIAL

AMERICA'S TEN LARGEST CITIES.

The ratio of the urban population of the world is steadily increasing. This is bad for food production. The delights of rural life have been sung for centuries, but man is a social creature and longs for the close proximity of his fellow-man. Life on the farm with the chickens and the pigs is all right for 3 or 4 weeks out of the 52. The much vaunted idea that people on the farm are healthier and live longer than those of the city, was long ago exploded.

The city water supply, the city sewage and city buildings are watched and controlled much more carefully and efficiently by the sanitarian than is possible with the same features of country life. The result is that New York City, Los Angeles, and some of the other large cities of the Western Hemisphere show a much lower death and morbidity rate than do states that contain no large cities.

Los Angeles was placed officially by the Census Bureau as the tenth city in the United States.

Pittsburg, the ninth city, only exceeds Los Angeles in population by 12,713.

The ten largest cities in the United States, according to the 1920 census, as confirmed officially by the Census Bureau at Washington, and their populations are:

1.	New York	5,621,151
2.	Chicago	2,701,212
3.	Philadelphia	1,812,158
4.	Detroit	883,739
5.	Cleveland	796,836
6.	St. Louis	772,897
7.	Boston	744,923
8.	Baltimore	733,826
9.	Pittsburg	588,193
10.	Los Angeles	575,480

URBAN SANITARIANS.

There is nothing more acutely interests sanitarians today than the increasing desire of the population to gather in cities. As we stated last month this has its disadvantages—economically but the water supply, contagious diseases and the hygienic education is much more completely controlled in the cities.

New York, San Francisco and Los Angeles each has an ideal water supply and the result is that typhoid fever is almost to the negligible point in those cities.

INFALLIBILITY OF HOSPITAL RECORDS?

In these days of hospital modernity when missionaries are going up and down the land preaching as to the almost divine function of hospital records, the following from the **Medical Record,** is a bit disheartening:

Clinical reports of a hospital were introduced in evidence without the person who made the entries being called as a witness. The senior surgeon, who signed them, testified that some of the facts stated in the reports were within his personal knowledge and others were not, and stated that "clinical records are not infallible by a long ways; they are frequently wrong, I will say." It was held that the trial judge did not err in instructing: "As to these hospital records, they have been received in evidence in this case. Their probative effect, that is, how much of them you believe, or how much of them you disbelieve, is left solely as a question for your determinations."—Wilson v. Detroit United Ry., Michigan Supreme Court, 175 N. W. 172.

EDITORIAL NOTES

Dr. Charles G. Stivers spent part of his vacation in Salt Lake City, taking post-graduate work at the University of Utah.

The twenty-fifth annual meeting of the American Academy of Ophthalmology and Oto-Laryngology will be held in Kansas City, Mo., October 14, 15, 16, 1920, at the Hotel Muehlebach.

Dr. Roland E. Skeel has terminated his hospital and college affiliations in Cleveland, and is now located in Los Angeles, at 456 S. Spring Street. Practice limited to surgery, including radium-therapy in approved cases of malignant disease.

The suit to break the will of Charles W. Fairbanks, who died in Indianapolis, Ind., in 1918, has been decided adversely, and the will stands. By its provisions the following bequests are made: The Methodist Hospital of Indianapolis gets $50,000, Ohio Wesleyan University at Delaware, Ohio, $25,000; Depauw University at Greencastle, $25,000, and St. Vincent's Hospital, Indianapolis, $2500.

Dr. L. Duncan Bulkley, announces that he has retired from the active practice of dermatology, and will devote his attention solely to consultation practice in the same and to the treatment of cancer. Dr. Bulkley has turned over his dermatological patients with their records to Dr. A. Schuyler Clark, 10 East 61st Street. Dr. Clark was formerly associated with Dr. Bulkley in private practice for a period of nearly five years, and has long been connected with the New York Skin and Cancer Hospital.

The government recently sent out the following statement: About one-tenth of the people of the United States live in the cities of New York, Chicago and Philadelphia, while more than one-quarter live in sixty-eight cities having a population of 100,000 or more, final statistics of the fourteenth census are expected to show.

The three cities with population of 1,000,000 or more—New York, Chicago and Philadelphia—have a combined population of 10,145,521, showing an increase of 1,644,347 or about 19.5 per cent, in the ten years since 1910.

L. A. IN 500,000 AND OVER CLASS.

Cities having 500,000 to 1,000,000 have increased from 5 in 1910 to 9 this

year, Los Angeles, Detroit, San Francisco and Buffalo having advanced into this class.

There was a net increase of 2 in the cities of 250,000 to 500,000 class with a total of 13 although 6 cities advanced into this classification. They are Kansas City, Missouri; Seattle, Indianapolis, Rochester, Portland, Ore., and Denver.

There are 42 cities of from 100,000 to 250,000 this year, a net increase of 11 although 17 have shown increases bringing them into this class.

CITIES OF OVER 100,000.

The complete list of cities having a population of 100,000 or more, some of which have ben revised since first announced, is given below in their order of rank with the designation of the 1910 rank and their 1920 population:

City	1910 Rank	1920 population	& rank
New York	1st	5,621,151	1st
Chicago	2nd	2,701,705	2nd
Philadelphia	3rd	1,823,158	3rd
Detroit	9th	993,739	4th
Cleveland	6th	796,836	5th
St. Louis	4th	772,897	6th
Boston	5th	748,060	7th
Baltimore	7th	733,826	8th
Pittsburg	8th	588,193	9th
Los Angeles	17th	576,673	10th
San Francisco	11th	508,410	11th
Buffalo	10th	506,775	12th
Milwaukee	12th	457,147	13th
Washington	16th	437,571	14th
Newark	14th	414,216	15th
Cincinnati	13th	401,247	16th
New Orleans	15th	387,219	17th
Minneapolis	18th	380,582	18th
Kansas City, Mo.	20th	324,410	19th
Seattle	21st	315,652	20th
Indianapolis	22nd	314,194	21st
Jersey City	19th	297,864	22nd
Rochester	25th	295,850	23rd
Portland, Ore.	28th	258,288	24th
Denver	27th	256,491	25th
Toledo	30th	243,109	26th
Providence	23rd	237,595	27th
Columbus	29th	237,031	28th
Louisville	24th	234,891	29th
St. Paul	26th	234,595	30th
Oakland	32nd	216,361	31st
Akron, Ohio	81st	208,435	32nd
Atlanta	31st	200,616	33rd
Omaha	41st	191,601	34th
Worcester, Mass.	33rd	179,754	35rd
Birmingham, Ala.	36th	178,270	36th
Richmond, Va.	39th	171,717	37th
Syracuse, N. Y.	34th	171,677	38th
New Haven	35th	162,519	39th
Memphis	37th	162,351	40th
San Antonio	54th	161,308	41st
Dallas	58th	158,976	42nd
Dayton	43rd	152,559	43rd
Bridgeport	49th	143,152	44th
Houston	68th	138,076	45th
Hartford	51st	138,036	46th
Scranton, Pa.	38th	137,783	47th
Grand Rapids	44th	137,634	48th
Paterson, N. J.	40th	135,866	49th
Youngstown	67th	132,358	50th
Springfield	60th	129,563	51st
Des Moines	62nd	126,468	52nd
New Bedford	53rd	121,217	53rd
Fall River	42nd	120,485	54th
Trenton, N. J.	52nd	119,289	55th
Nashville	45th	118,342	56th
Salt Lake City	57th	118,110	57th
Camden, N. J.	56th	116,309	58th
Norfolk, Va.	82nd	115,777	59th
Albany, N. Y.	50th	113,334	60th
Lowell, Mass.	46th	112,759	61st
Wilmington	61st	110,168	62nd
Cambridge	47th	109,694	63rd
Reading, Pa.	55th	107,784	64th
Fort Worth	75th	106,482	65th
Spokane	48th	104,437	66th
Kansas City, Kans.	65th	101,177	67th
Yonkers, N. Y.	66th	100,226	68th

BOOK REVIEWS

DISEASES OF CHILDREN. Presented in Two Hundred Case Histories of actual Patients Selected to Illustrate the Diagnosis, Prognosis and Treatment of the Diseases of Infancy and Childhood, with an Introductory section on the Normal Development and Physical Examination of Infants and Children. By John Lovett Morse, A.M., M.D. Professor of Pediatrics, Harvard Medical School; Visiting Physician at the Children's Hospital, and Consulting Physician at the Infants' Hospital and at the Floating Hospital, Boston. Third Edition. Boston, W. M. Leonard, Publisher, 1920.

In this edition the book has been thoroughly revised and such methods of diagnosis and treatment as have proved themselves worthy of adoption in the interim since the last edition suggested or advised. On this account the statement made in the second edition that "the treatment recommended in the text was that actually employed," is now not strictly true. The section on the diseases of the gastro-enteric tract has been rewritten and a number of new cases substituted for old in the other sections. The general plan of the book remains the same. The entire subject is covered by the presentation of two hundred cases in an interesting and thoroughly readable manner. The paper is poor, but the text is excellent and will insure a continuance of the very justifiable popularity of this eminent text-book.

The discussion of gastric capacity is interesting. The measurements ordinarily given for the gastric capacity at different ages are practically useless, because those based on experiments on the cadaver are obtained under abnormal conditions, while those based on the amount of food taken at a feeding neglect the fact that the pylorus opens and lets food through, even while it is being taken. It is safe to say, however, that the capacity of the stomach at birth is approximately one ounce. It is also true that the growth of the stomach is very rapid in the first three months, slow in the second three months, and more rapid in the fourth quarter than in the third. Breast fed babies of the same age take in a general way about the same amount of food in twenty-four hours, but the amount taken at individual feedings varies tremendously, according to the appetite at the time and the interval between the feedings. While these facts are true, experience shows, nevertheless, that artificially fed babies, if fed at regular intervals, take, on an average, about the following amounts:

Three months, 4 ounces (120 cc.)

Six months, 6 ounces (180 cc.)

Nine months, 8 ounces (240 cc.)

One year, 9 to 10 ounces (270 to 300 cc.)

EPIDEMIOLOGY OF TUBERCULOSIS. With especial reference to Tuberculosis of the Tropics and of the Negro race. By Geo. E. Bushnell, Ph.D. M.D., Colonel, United States Army (Medical Corps) retired. Honorary Vice-President and Director National Tuberculosis Association of the United States. Member American Climatological and Clinical Association. New York, William Wood and Company. Price $2.75.

From a wide survey of the incidence and severity of tuberculosis in many countries, it would seem, if we may trust the facts obtainable, that the degree of immunization is the highest in the oldest and most stable communities and that the immunization of the savage or semi-civilized community is less satisfactory than that commonly obtained in our civilization. This Bushnell would ascribe to the constant interchange in our civilization of articles that pass through any unknown hands, which practically insures the ubiquitousness of the dried tubercule bacillus, which is an advantage, for it insures that the inevitable and indeed desirable tuberculization, shall be accomplished in most cases by means of a somewhat attenuated bacillus and that the infecting dose will be usually small. The volume will prove a treat to those who like to think and are interested in tuberculosis.

DIAGNOSTIC METHODS. Chemical, Bacteriological and Microscopical. A text-book for Students and Practitioners. By Ralph W. Webster, M.D., Ph.D. Assistant Professor of Pharmacological Therapeutics and Instructor in Medicine in Rush Medical College, University of Chicago; Director of Chicago Laboratory, Clinical and Analytical. Sixth edition, revised and enlarged with 37 colored plates and 170 other illustrations. Philadelphia, P. Blakiston's Son & Co., 1012 Walnut Street.

Among the additions are quite a number of new methods from the laboratory of Folin, such as Folin and Bell's direct nesslerization method for ammonia in urine; Folin and Denis' direct nesslerization method for total N in urine, and their method for lactose in milk; Folin and McEllroy's test for sugar in the urine; Folin and Peck's method for sugar in urine; Folin and Wright's simplified Kjeldahl method; Folin and Wu's system of blood analysis, which includes methods for creatin and creatinin in blood, non-protein nitrogen in blood, sugar in blood, urea in blood, uric acid in blood, and uric acid in urine; Folin and Youngburg's direct nesslerization method for urea in urine. The subject of functional renal diagnosis has been extensively enlarged and a full discussion of Mosenthal's Test Meal for Renal Function has been included. The section dealing with the reaction of the blood has been entirely rewritten to bring

it up to the present day conception of Hydrogen-ion concentration; in this section the following methods have been included, as measures of the reserve alkalinity and the total PH of the blood: Van Slyke and Cullen's method for CO2 combining power of the plasma; Van Slyke, Stillman, and Cullen's titration method for plasma bicarbonate; electrometric methods for determination of PH; Levy, Rowntree and Marriott's method for hydrogen ion concentration; Marriott's method for alkali reserve. In the discussion of the parasitology of the blood, the subject of Infectious Jaundice has been introduced, a full account of the Leptospira icterohaemorrhagica being given. Included among the serum reactions for syphilis is the Coagula Reaction of Hirschfeld and Klinger, which has great promise. In the section on Clinical Bacteriology, the discussion includes the Gas Bacillus of Welch, which assumed considerable importance in the study of wound infections during the war. Throughout the text the subject-matter has been brought thoroughly up-to-date. Webster has made for himself an excellent reputation for reliability, and it is a pleasure to continue to recommend his Diagnostic Methods in this, its sixth edition.

MISCELLANEOUS

A very valuable and interesting work has just been published by The Macmillan Co., New York. It is entitled, "The Treatment of Syphilis," and is from the pen of H. Sheridan Baketel, A.M., M.D. The volume covers very thoroughly and convincingly the field of intravenous and intramuscular medication, and the administration of arsphenamine or neoarsphenamine. It gives in minutiae, step by step, the proper methods for the actual introduction of arsenical products into the system.

Speaking of the after treatment in cases where intramuscular injections have been given, the author says:

"In England and on the continent it is the habit, after giving an intramuscular injection, to cover the surrounding parts with sterilized absorbent cotton fixed with elastic collodion. The patients were instructed to rest in bed for twenty-four hours and, according to various reports, the majority of them complained only of stiffness in the hip and thigh and occasionally of pain in the lower extremity.

"Some physicians also utilize a clay dressing, like antiphlogistine, in place of cotton. It is their custom to cover the entire gluteal surface with a thick layer of properly heated antiphlogistine and to cover this with gauze, and over that the absorbent cotton. This application seems to work well following the intramuscular injection and, not only aids in the prevention of pain and to a considerable extent prevents any abscess formation, but enables the patient to attend to his ordinary affairs."

Dr. Baketel is Professor of Preventive Medicine and Hygiene and Lecturer on Genito-Urinary Diseases and Syphilis in the Long Island College Hospital, Brooklyn, N. Y.; Attending Syphilologist and Chief of Clinics at Volunteer Hospital, New York; Genito-Urinary Surgeon to the House of Relief of the New York Hospital; Lieut. Col. Medical Reserve Corps, U. S. Army, etc., etc.

International Association "Pneumothorax Artificialis."

Lugano, August, 1920.

The International Association of "Pneumothorax Artificialis," of which the work was paralyzed during the long war, desires to resume its activity by inviting all former members of the association to renew their subscription and all other physicians interested in artificial pneumothorax to send their names and addresses to Prof. Umberto Capri, Lugano, Switzerland, and to become members.

The purpose of the association is to spread all practical and scientific information concerning artificial pneumothorax. Although induced pneumothorax for therapeutic purposes has become remarkably prevalent (**"Bien que la diffusion de la thérapie du Pneumothorax soit devenue trés remarquable"**), it has remained a therapeutic procedure applied only by physicians specially trained and experienced in this operation. For the convenience of the patients who may be obliged to change their residences, to know the names and addresses of physicians who practice artificial pneumothorax is of great value, in order that the patient may continue the treatment by periodic refilling. A complete list of physicians practicing artificial pneumothorax will be published with the scientific journal known as "Pneumothorax Théropeutique" for 1920-1921, edited by Carlo Forlanini. This list will be sent to all the members and to the most important medical societies, medical academies, and similar institutions of the different countries. In the journal will be enumerated and discussed all the world's literature on pneumothorax. The association will continue its labors under the policy indicated by the illustrious master and creator of artificial pneumothorax therapy. As soon as the finances of the society will permit the renewal of the publication, the editor will put himself in communication with the editors of such medical journals of other countries as are publishing articles on artificial pneumothorax. For the present these are "die Sonderhefte des Tuberkulose Centralblattes ueber Lungenkollapstherapie" and the collected monographs in the journal "La Tuberculosi" which appears in Rome. (I trust that our very excellent "American Review of Tuberculosis," edited by Prof. Allen K. Krause of Baltimore, will be included in this list.—S. A. K.)

The subscription price of 5 francs should be addressed to the General Secretary, Prof. U. Carpi, Lugano. The subscriber is entitled to receive the journal with the list of names. Those who desire to receive the monographs of the journals indicated should make a request for them to the General Secretary, who also has an international exchange office for all publications appertaining to artificial pneumothorax. Summaries in English, French, and German on any topic relating to artificial pneumothorax will be gratefully received and published.

PROF. U. CARPI,
General Secretary, Lugano, Switzerland.

SOUTHERN CALIFORNIA PRACTITIONER.

Vol. XXXV. LOS ANGELES, OCTOBER, 1920 No. 10

*THE QUACK QUARTETTE.

BY HON. WALTER BORDWELL, ESQ., LOS ANGELES.

There are four measures which will be on the ballot at the ensuing November election vitally affecting the public health; these measures also seriously affect some of our very important industries and the material prosperity of the community, aside from bearing upon the public health.

Obviously anything affecting the public health demands the most serious consideration of all classes of citizens.

The measures referred to will be numbered 5, 6, 7 and 8 on the ballot.

No. 5 is known as the Chiropractic Act. It is an initiative proceeding, the purpose of which is to organize an independent board for the examination of those who would practice chiropractic and control their professional activities. At the present time those who would practice chiropractic must present themselves for examination to the State Medical Board and must show themselves qualified according to the rules prescribed by that board. There seems to be no necessity for the creation of another board for the performance of the functions now exercised by the Medical Board. This proposed bill will tend to lower the grade of excellence of certain of those who practice their profession for the relief of human suffering and the cure of physical disorders. Certainly those who thus practice should possess the very highest ability as tested by education, skill or experience. There will be differences of opinion whether or not this measure is vicious. It seems to be unnecessary as all those who are entitled to its intended benefits can secure the same under the present law from a board whose standard of ability and excellence is certainly equal, if it does not exceed that of any board that will be created under the proposed law. It is an unnecessary and useless measure. Vote "No."

No. 6 is known as the proposed initiative Constitutional Amendment Prohibiting Compulsory Vaccination under any circumstances or for any purpose. If passed, it would preclude the operation and passage of laws excluding children or teachers from public school attendance in times of outbreaks of smallpox or any other disease which is con-

*This address was delivered before the Sunset Club, Sept. 24, 1920.

trollable by any sort of medication. It is so worded that it would preclude the examination of pupils or teachers to ascertain if they were infected with any sort of contagious disorders such as lice, itch, ring worm, contagious sores, pink eye, diphtheria, tuberculosis, scarlet fever, infantile paralysis, smallpox and other diseases; or if perchance it were discovered that they were so infected, this proposition, if it were endorsed by a majority of the voters, would preclude the requirement of any treatment for the correction thereof as a condition to such attendance at school. This is the very thing many of the proponents of the measure openly and avowedly declare to be their desire and purpose. They are not willing to recognize that there is any such thing as a disease known as smallpox, diphtheria, tuberculosis, scarlet fever or infantile paralysis, or that the same can be prevented or cured by remedial treatment. They entirely ignore history, which establishes beyond a question that such diseases do exist. And then they deny that vaccination would prevent smallpox or that any kind of preventive treatment would be efficacious as against any of the diseases or disorders above mentioned. And they further propose to enforce their theories upon all the citizens of the state and allow smallpox and other diseases to run rampant through the community as it does in Mexico, causing untold suffering, death, and patients who happily recover, to be pockmarked for life. These proponents of the law say in effect, "You must let our children attend public schools, even though they might be infected with, and spread among healthy children, the most dangerous diseases." The protection of our homes against any such iniquity demands the votes of the people against it.

But, say those who favor this kind of law, "it is an invasion of our personal liberties to require that our children should be vaccinated or otherwise treated to prevent contagion of vile diseases as a condition to our enjoyment of our public schools." It is nothing of the sort. There is no law, existing or proposed, which would require children to be vaccinated, if they or their parents do not wish it. The only law bearing upon the subject is that in case of outbreak or epidemic of smallpox, for instance, children must be vaccinated or absent themselves from school. It is entirely optional with them. There is no invasion of individual liberty in this. Certainly it cannot be said, with any show of reason, that it is an invasion of individual liberty to require that a person who has been exposed to, or is infected with smallpox, shall not be allowed to mingle indiscriminately with his fellow men thus communicating the disease to them. Such proposition on its face is odious and repugnant.

It is one thing to claim the right to the exercise of private views on questions of health; but it is quite another thing to attempt to force those views on the public at large by enacting them into law and compelling all to comply therewith. It is said that some judge of a North Dakota court, in a concurring opinion upholding some Dakota law, made some unpleasant animadversions, indicating that he was out of sympathy with those who would protect themselves and their families from contagious diseases. I don't know the judge nor the circumstances under which his observations were made. Suffice it to say that there is nothing to indicate that the offensive language was in any way required or justified. At any rate it has no pertinency to the questions in hand. Far better consider what our own Supreme Court has said on the subject, to-wit:

> "The act referred to (to prevent the spread of smallpox) is designed to prevent the dissemination of what, notwithstanding all that

medical science has done to reduce its severity, still remains a highly contagious and much dreaded disease. While vaccination may not be the best and safest preventive possible, experience and observation, the test of the value of such discoveries, dating from the year 1796, when Jenner disclosed it to the world, have proved it to be the best method known to medical science to lessen the liability to infection with the disease of smallpox.'' Abeel v. Clark, 84 Cal. Page 229.

If the proponents of this measure have their way, we may expect epidemics of smallpox, scarlet fever, bubonic plague, cholera and other horrible diseases and wholesale deaths. And our health officers would, by this proposed law, be seriously hampered in their efforts to cope with the situation. Vote ''No.''

The proposition No. 7 is known as the Anti-Vivisection Act and is intended to prohibit any kind of operation or experimentation upon a living animal for physiological or pathological purposes, neither under anaesthesia nor otherwise.

No doubt, some of those who favor this proposition are actuated primarily by sentiments of kindly feeling towards dumb animals. They probably, in good faith, desire to prevent what they think may be the imposition of any kind of cruelty upon them. With this sentiment one must sympathize.

But we now have on our statute books (Sec. 597 P. C and the sections immediately following) laws making it a crime to maliciously inflict any cruelty upon dumb animals and providing drastic punishment for such offenses. The proponents of this measure contend that Section 599c of the Penal Code annuls the other provisions against cruelty so far as scientific experiments or the performance of scientific investigations are concerned. This claim is without reasonable foundation. There is no warrant for the proposition that malicious cruelty may be inflicted under the guise of scientific experiments or investigations. Infliction of malicious cruelty on dumb animals under such guise would subject the perpetrator to conviction of crime and the imposition of severe penalties. Vivisection, conducted by the medical or surgical profession or by any scientist in this state, is always done under anesthesia and the attempt to make it appear that scientific experiments or investigations are done in a cruel manner is a serious blunder and grossly misleading. If these anti-vivisectionists can point to a case where animals are being treated cruelly by those engaged in scientific experiments and produce evidence in support thereof, the perpetrators are subject to prosecution and punishment.

If the proposed law went into effect it would be impossible, in this state, to produce certain serums for the prevention or cure of dreaded diseases. For instance, we could not procure vaccine to prevent smallpox; antitoxin to cure diphtheria; vaccine for treatment of hydrophobia; antitoxin to prevent lockjaw; anti-meningitis serum for the threatment of epidemic meningitis; and serum for immunization of hogs against hog cholera; and if this proposition became a law, it would preclude the use of the guinea pig, which is absolutely necessary to the making of the Wassermann test for syphilis; also prevent experimentation upon fleas, ground squirrels and rats, which experiments are necessary for the determination of the existence and proper treatment of bubonic plague, which is not infrequently introduced to our harbors; there would be denied the use of certain birds, necessary for the determination of the existence of carbonmonoxide gas (damps) in mines; also it would preclude the use of birds to determine the nature

of poisonous gasses used in times of war and for the discovery of substances to counteract the deadly effect of gasses used by the enemy army; it would preclude the production of the serum for the cure of cholera in hogs, and it would render impossible the certification of milk by the public authorities, the test of cows for tuberculosis being prevented.

If this proposition were enacted into law it would prevent the culture of the anti-toxin serum, which is the only known remedy to prevent that horrible disease known as lockjaw. In the early stages of the Great War a very large number of wounded soldiers died from this terrible disorder; but later on the medical department of the service employed the anti-tetanic serum with such success that few, or no, wounded soldiers thereafter died from this cause.

The soldiers of this country and of the various other countries engaged in the recent war, were subjected to vaccination to prevent smallpox and typhoid disorders. And, no doubt, every soldier in the armies of our enemy were similarly treated. Such treatment was for the purpose of preventing, and did prevent, some of the terrible scourges which have, in times past, infected the armies of nations. The requirement of such treatment was not an idle or capricious act, but was resorted to by the various governments because it was known to be efficacious. This fact furnishes conclusive proof that science has advanced and, in a large measure, controls epidemics of the terrible disorders which, in former times, disseminated the armies of nations. Improved sanitation is, of course, helpful; but that is not enough. Experience has taught that nothwithstanding the greatest care in the matter of sanitation, it is not sufficient to prevent these diseases, but that vaccine and other serum treatments are absolutely necessary to control them.

It may be stated with assurance that scientists in the present day are not at all guilty of inflicting cruelty upon dumb animals who are used for the purpose of experimentation in aid of medical science to protect the health of our citizens. With the advent of the various forms of anaesthesia, all cruelty is unnecessary and is entirely avoided. But if it were otherwise and if some suffering to dumb animals were necessary for such experimentation, what sane person will claim that such suffering would not be justified if thereby we could, in some measure, advance the protection of the human race from disease? Shall we see our children suffer and die from diphtheria, spinal meningitis and other vicious diseases which are now subject to control or cure as the result of the experimentation under discussion because some misguided people desire to prevent all experimentation upon living animals? Choose between experimentation on living animals and the cruel suffering of our own children. The anti-vivisection proposition is a most egregious mistake.

If the effort were to enact a law to regulate vivisection to the end that our dumb animals would be protected against all unnecessary suffering, it would appeal to us. But there is no call for such regulatory law for the reason that no cruelty or unnecessary suffering is inflicted upon our dumb brutes in the present day and age. Furthermore the law at present on our statute books will amply prevent any such infliction of cruelty or unnecessary suffering.

These propositions which have been discussed constitute a concerted attack upon the public health. By them it is proposed to wipe out and render unavailable much that has been accomplished by science in the field of ex perimentation, turn back the wheels of scientific progress for the amelioration of human suffering, leave those of

the persent generation and of the generations yet to come, to the mercy of rampant diseases. It is a distinct step backwards and the people of this state must arouse themselves to the danger, and prevent the infliction of the proposed monstrous wrong.

The medical scientists of the present day are a noble body of devoted men and women, struggling to advance civilization and improve the individual man and woman by aiding them to overcome or prevent diseases, thus strengthening their physical health with beneficial reflex influences on their mentality and their moral and spiritual well being. Thus is the community and the nation made strong. "The strength and virility of a nation is measured by the health and bodily vigor of its citizens."

This body of men and women have taken up the fight against these insidious measures. They are entitled to, and it is to be hoped they will receive, our moral and financial support. We should assist with our time and our efforts and our money.

So well are the benefits resulting from the efforts of medical scientists understood by the people of France that that noted scientist, Pasteur, has been formally proclaimed by that nation as the greatest of all.

The science of medicine is empirical; only by experimentation is progress possible; the success of experimentation depends largely on the use of dumb animals as subjects.

The proposition that these proposed laws should be enacted by the people is really an effort of those who fanatically, or with undue religious zeal or ignorantly, affect disbelief in the efficacy of the science of medicine. Ignoring history and abundant evidence they would destroy what has been accomplished by those devoted to the promotion of public health conditions.

That, under the direct legislative system, a small percentage of voters, most of whom sign initiative petitions unthinkingly and only because of importunities, can put on the ballot measures so vicious as these under discussion, depending for their adoption or rejection upon the ignorance or caprice or prejudice of uninformed voters, is most deplorable. But the condition has arisen and there is no way out but to do the best there is in us to prevent the accomplishment of the most objectionable efforts of those who would inflict irreparable wrong to our citizenship.

I yield to none for confidence in the sound judgment of the voters of this country on matters properly submissible to them when they are properly instructed. But the submission to them of a purely scientific question is worse than folly; it is wholly without reason and subversive of the interests of good government. At times the direct legislation laws of this state have been used advantageously, but on the whole. it does not seem to work out for the advantage of the community and runs counter to the lines of our form of representative government. Vote "No" on number 7.

Proposition No. 8, as it will appear on the ballot, is known as the "Poison Act." It is a referendum of an act passed by the Legislature at the last session. Under its provisions the right to prescribe poisonous drugs, opium and other narcotics, is denied to persons ignorant of the science of medicine. It is a most dangerous measure and the voters should vote "Yes" on this proposition, thus supporting the Legislature in the enactment of a wise law for the benefit of public health, which law has been held up by referendum proceedings by persons who, without proper license, desire to traffic in opium and other narcotics, thus increasing the number of unfortunate drug addicts in the community to our everlasting disgrace.

A CASE REPORT.*

BY NORMAN H. WILLIAMS, M.D., LOS ANGELES.

Mrs. E. D. C., white. by occupation housewife, age 25 years, para 2. Family and previous history of patient negative except for previous pregnancy and labor. Married twice, first five years ago, second time a year and a half ago. By the first husband had one pregnancy; the child weighed 12½ pounds at birth and is now healthy at four years of age. The pregnancy was normal, but labor was extremely difficult and delivery was terminated by use of forceps. Patient does not know the details of the delivery or labor nor the cause of the difficulty.

In January, 1920, the patient came to me concerning her present pregnancy; the estimated date for confinement was July 17th. The pregnancy was uneventful except for rather severe vomiting beginning in December and lasting until about the middle of February. Luetin extract was given with possibly some benefit. At no time did the urine show anything abnormal, and the blood pressure showed high test systolic 120 and lowest diastolic 72 mm.

Physical examination. On July 27th, she entered the hospital for induction of labor; having gone ten days beyond the expected date and giving a history of a difficult labor with a large child, it seemed advisable for her to do so. With castor oil and quinine, labor began without difficulty about eight o'clock that evening. At ten-thirty when I saw her the pains were rather vigorous, coming every three minutes. The foetus was in the left occiput posterior position and heart rate was 144; the mother was in good condition except suffering from the pains. At about eleven o'clock I started nitrous oxide analgesia and continued this for four hours and a half. By this time the pains were severe, there was a constant pain in the back and the uterus was becoming tetanic. Because of this she was given morphine and bromide, which gave relief for about an hour, when the condition returned. The cervix was, by this time, dilated about three fingers but was thick and boggy, the head was still rather high but had rotated to a transverse position and was poorly flexed. For the tonic spasm of the uterus she was given whiffs of chloroform for half an hour. At five o'clock the cervix was dilated about four fingers, was thick and boggy and the inner ring was extremely resistant. The patient was put in the lithotomy position and under ether anesthesia the cervix was dilated manually and after rupturing the membranes mid-forceps were applied; with combined rotation and traction delivery was accomplished without great difficulty. There was no perineal tear, but the cervix had considerable tear bilaterally. On account of bleeding, these tears were immediately repaired following the third stage. The placenta and membranes were delivered without difficulty in ten minutes after the birth of the child; very gentle Crede was used. At the subsequent examination of the secundines it was thought that they were complete, but as subsequent history proved, they were not.

On August 2nd, five days post-partum, patient on account of financial conditions, chiefly, requested to go home by ambulance and be cared for by members of the family. As the puerperium had been perfectly normal in every respect she was allowed to do so.

On August 9th I was called to see

*Read before the Los Angeles Obstetrical Society, October 12, 1920.

her and found that up to two days ago (or 12th day p.p) her condition had remained excellent, but at that time she began passing clots and had considerable bleeding by vagina. When I saw her she was pallid, pulse 116, seemed generally weak and complained of dizziness and severe headache. In other words she appeared as though she had lost a good deal of blood, and even at that time, was bleeding considerably. The abdomen was sensitive and pelvic examination showed that the uterus was rather large, soft and tender to the touch; the cervix was open and the tears in it were healing nicely; there was no fetid odor to the iochia. In the cervix I could feel what seemed to be a piece of placenta and with the aid of the speculum and dressing forcep, I withdrew a small succenturiata about 4x10 cm. in size. At that time the temperature was 99.4.

That evening, though the bleeding had completely stopped, her condition was not good. The temperature was 102.6, pulse 124 and not of good quality. She was delirious and complained of pain, but could not localize it for us. However, she seemed to be particularly sensitive over the lower abdomen, though this was not rigid to any degree. She had not passed water for about twelve hours, so I catheterized her, obtaining twenty ounces of high colored and turbid urine which upon examination showed no particular abnormality other than concentration. Following catheterization she seemed more comfortable. She was given the usual treatment for secondary anemia following hemorrhage.

The following morning the patient seemed much better, she was conscious and had no acute pain except over the region of the bladder which I found distended; about 30 ounces were obtained by catheter, she being unable to void normally. The temperature was 101.4, pulse 120. The whole abdomen seemed sensitive to pressure, though there was no distinct rigidity. As she could not be given efficient treatment at home, she was returned to the hospital.

On August 13th, seventeen days after delivery, her condition had improved somewhat. The temperature varied from 102-99, running a septic course; the pulse remained above 100 most of the time. The tenderness in the abdomen had greatly subsided though some still remained over the region of the left tube. The mucous membranes still showed a decided degree of pallor and the constant headache, due doubtless to the anemia, was a source of great distress and did not seem to be relieved by medication of any sort. The blood count shows 1,500,000 r.b.c HB 27% and 6,800 w.b.c.—a rather severe grade secondary anemia.

On August 14th, eighteenth day post-partum, I transfused her with nearly six hundred cc. of her husband's blood by the direct canula syringe method. Within a half an hour after the transfusion she felt better than she had felt since the hemorrhage of the week before, her headache disappeared, a general feeling of well being returned and her color changed from that of extreme pallor to that of a robust, healthy person. On the following day she had all evidence of being perfectly well, the temperature normal, pulse much slower and color excellent.

Four days after the transfusion the blood showed 2,500,000 r.b.c, 7,000 w.b.c and Hb. 49%. Her general condition was excellent and her strength and vigor rapidly returning, her appetite good, the temperature remained normal after transfusion and her color much improved. Returned home feeling well, but easily fatigued. I saw her about ten days ago and she feels perfectly well and her color is remarkably good.

The presentation of this case is not

made with the purpose of introducing anything new in obstetrics, but inasmuch as it combined several problems that we, as obstetricians are interested in, it seemed worth while to review it.

First—The posterior position with the resultant "deep transverse arrest," and the difficulty that condition can cause in labor and delivery.

Second—The ease by which a portion of the membranes or placenta may be left in the uterus, even after an apparently careful examination. Had I observed the margin of the placenta more carefully I might have found the vessels of the succenturiata broken across. In fact had I know that a portion of the placenta had been left, would it have been wise to have removed it at that time?

Third—The repair of a torn cervix at time of delivery. One suture on each side would doubtless have controlled the bleeding.

Fourth—The post-partum hemorrhage on the twelfth day.

Fifth—The miraculous results of transfusion in this type of anemia.

Sixth—Nitrous oxide, a possible factor in the uterine tetany.

These are the essentials I would present for consideration.

1501 So. Figueroa St.

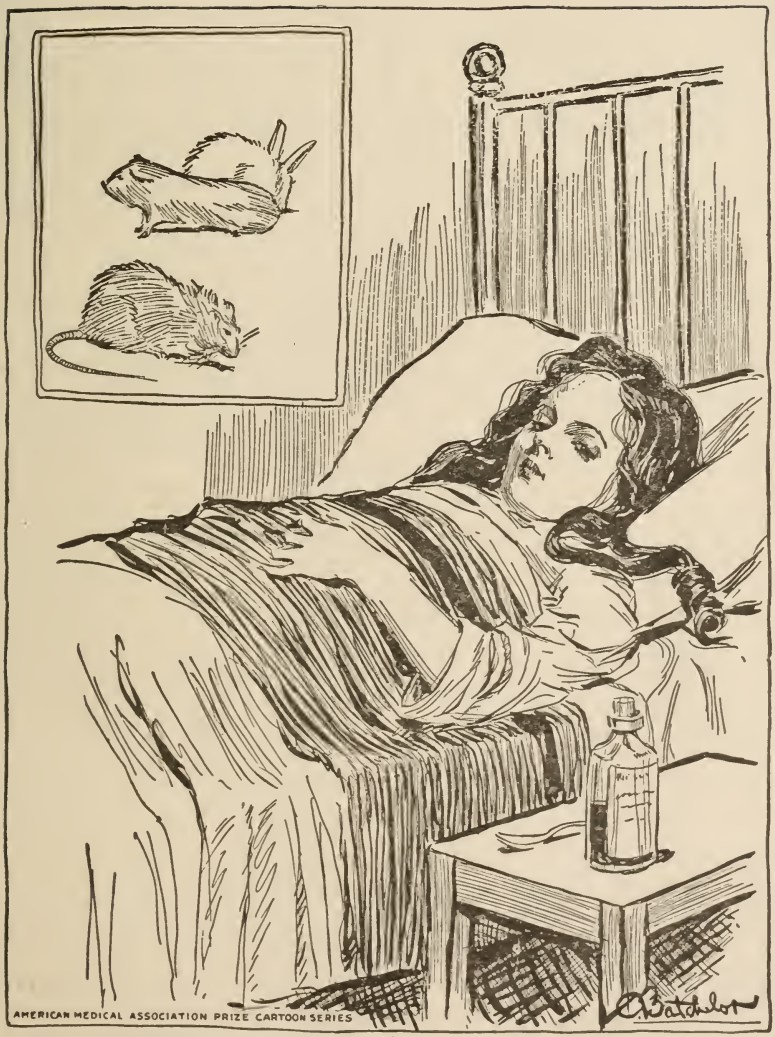
At a recent meeting of the California State Board of Health, the following resolutions were adopted:

WHEREAS, It has been found upon investigation by the Bureau of Sanitary Engineering of the State Board of Health, that the water supplied by the Huntington Beach Water Company from Wells No. 2 and and No. 3, contains an excessive amount of sodium chloride, and is considered unfit for human consumption; while the water from Well No. 1 is found to be potable and suitable for domestic purposes,

THEREFORE, BE IT RESOLVED that the Huntington Beach Water Company is hereby granted a permit to use water from Well No. 1 for domestic purposes in the City of Huntington Beach, Orange County, and,

BE IT FURTHER RESOLVED that water from Wells No. 2 and No. 3, on account of the excessive amount of sodium chloride, is not considered fit for domestic purposes, and permit for distribution of same for domestic purposes is hereby denied and previous permits revoked, and

BE IT FURTHER RESOLVED that samples of water from Well No. 4, when completed, shall be submitted to the Bureau of Sanitary Engineering for analysis, and permit for use of same for domestic purposes be obtained from the State Board of Health before it is turned into the domestic supply.



"IT IS INFINITELY MORE HUMANE, THAT A FEW ANIMALS DIE IN SCIENTIFIC RESEARCH, WITH LITTLE OR NO PAIN, THAN THAT THOUSANDS OF LITTLE CHILDREN SHOULD LIE ON BEDS OF PAIN AND PERHAPS AT LAST, DIE IN AGONY.

SOUTHERN CALIFORNIA PRACTITIONER.

A MEDICAL, CLIMATOLOGICAL AND SOCIOLOGICAL MONTHLY MAGAZINE.
This journal endeavors to mirror the progress of the profession of California and Arizona.

Established in 1886 by Walter Lindley, M.D., LL.D.
DR. GEORGE E. MALSBARY, Editor and Publisher.

Associate Editors,
Dr. Walter Lindley, Dr. W. W. Watkins, Dr. Ross Moore, Dr. George L. Cole,
Dr. Cecil E. Reynolds, Dr. William A. Edwards, Dr. Andrew W. Morton,
Dr. H. D'Arcy Power, Dr. B. J. O'Neill, Dr. C. G. Stivers,
Dr. Olga McNeile, Dr. W. H. Dudley, Dr. J. M. Mathews.

Address all communications and manuscripts to
EDITOR SOUTHERN CALIFORNIA PRACTITIONER,
Suubscription Price, per annum, $1.00. 1414 South Hope Street, Los Angeles, Cal.

EDITORIAL

"THE QUACK QUARTETTE."

The vote upon the four anti-health measures, at the general election, Tuesday, November 2, 1920, will be an index of the intelligence of the voters in this state. If the medical profession were actuated by selfish motives, we would not oppose the evil influences that espouse these measures of initiative and referendum, for they would ultimately markedly increase the work and revenue of our profession. A sense of noblesse oblige precludes the possibility of our profession being animated by such sordid motives. The obligation to protect the public health, that rests upon all the members of our honored profession, is so well recognized by both the profession and laity that no member of our profession can disregard the duty thus imposed and retain the respect of himself or of his profession or of the laity. Such professional outcasts and those who practice the healing art for revenue only, the vilest of quacks, encourage or lead in the vilification of our profession upon every opportunity. Why should an honorable profession, such as ours, be vilified? Because we are unalterably opposed to those who would prey upon the sick. Our opposition to quackery in all forms, a noble duty assumed by our profession for the protection of the people, naturally arouses the opposition of quackery of all sorts to our profession. We should be proud of such opposition, which is but a token of our effective work for the health and welfare of the people, an evidence that we truly and in a most practical way recognize the noble obligation to protect the public health that attaches to membership in our profession.

The following summary of the four anti-health measures has been prepared by the League for the Conservation of Public Health, a lay organization that deserves the support of our profession.

FOUR ANTI-HEALTH MEASURES.
("The Quack Quartette.")

Four Anti-Health measures appear together on the ballot and have a singular unity of purpose. They are propositions Nos. 5, 6, 7 and 8 and are appropriately called "The Quack Quartette."

Vote "NO" on Nos. 5, 6 and 7—But

Vote "YES" on Number 8 at the general election Tuesday, November 2, 1920.

5	**No. 5—The Chiropractic Initiative Act** proposes to create a Board of Examiners composed exclusively of chiropractors for the exclusive benefit of certain groups of chiropractors. This dangerous demand for special legislation was rejected by the last Legislature and previous Legislatures. Vote "No."	Yes		Mark X Here
		No	X	

FIVE REASONS TO VOTE "NO" ON NO. 5.

1. There are 27 drugless cults in California, chiropractic being only one of them. If chiropractors are granted a special board, the other 26 are equally entitled to special boards.

2. With 27 varieties of boards to examine 27 varieties of cults, the state would lose proper control and could not protect the lives and health of its citizens from the incompetent, unskilled and unscrupulous.

3. The Chiropractic Initiative is based on the false pretense that the present California Board of Examiners is unqualified to examine chiropractors. All competent applicants can now secure licenses by passing the examination and complying with lawful requirements.

4. The Chiropractic Initiative is promoted by Chiropractic Colleges and groups of "Advertising Specialists" who declare that chiropractic contains "unlimited possibilities for great financial success." If granted the power to license themselves, regardless of educational qualifications, "great financial success" may be won at the expense of the sick.

5. The welfare of the public is best protected by **One Responsible Board.** The Governor can change the membership of the present board whenever he deems it desirable. The courts can review and reverse the board's decisions. From such a well-regulated board all applicants are assured of ample justice and the people of adequate protection.

Vote No on Number 5.

6	**Prohibiting Compulsory Vaccination** is the misleading title of No. 6—the anti-vaccination, anti-inoculation, anti-medication, anti-health constitutional amendment. The California State Board of Health declares that if Number 6 is adopted "Our State will be in constant danger of an epidemic of smallpox and the State Board of Health will be powerless to check such an epidemic." Vote "No."	Yes		Mark X Here
		No	X	

SIX REASONS TO VOTE "NO" ON NO. 6.

1. It is filled with lurking dangers. It breaks down necessary health, sanitation and quarantine laws. It not only removes the safeguard of vaccination, but outlaws "inoculation or other medication." Which means that children may come from homes in which there is diphtheria, scarlet fever, measles, infantile paralysis and any infectious or communicable diseases and attend school and endanger the lives of your children.

2. To understand the real purpose of Number 6, the voter must read the

official report of "The Public School Protective League"—a religio-politico organization which placed this anti health amendment on the ballot. Its official report shows that it worked actively against the public health activities of the Children's Bureau, the National Tuberculosis Association, the Red Cross, the Y. M. C. A., the War Camp Community Service, the Junior Red Cross, dental nurses, et al., and hampered the Federal, State, County and City Boards of Health.

3. In the light of its anti-health record, the specious plea of the mis-named "Public School Protective League," that its only purpose is to prohibit compulsory vaccination of school children, is shown to be deceptive.

4. California already has a law exempting children from vaccination whenever parent, guardians or persons responsible for them are conscientiously opposed to the practice of vaccination.

5. American law does not recognize the right of the individual to do as he pleases when his acts endanger the life or health of his family, his neighbors or the citizens generally. Number 6 demands these perilous privileges.

6. All health and medical authorities agree on the protective value of vaccination. The United States Government insists on vaccinating all who join the Army or Navy—Why? Because vaccination protects them. It would be criminal folly for California to nullify its health laws and abandon a thoroughly tested and reliable method of protection against the dreadful scourge of smallpox. A vote for the anti-vaccination amendment is a vote for smallpox. Vote "No" on Number 6 and defeat this Epidemic Amendment.

7	No. 7—Prohibiting Vivisection. A destructive measure proposed by the misguided and supported by the misinformed. It prohibits "Experimentation" on rats, fleas, mosquitoes, rabbits, mice, guinea pigs, snakes, birds, cats and dogs and on all other animals, regardless of whether the "experimentation" involves any cutting or causes any pain. It would be as pernicious to animals as to man. It would stop the progress and destroy the development of California's resources. Vote "No."	Yes		Mark X Here
		No	X	

SEVEN REASONS TO VOTE "NO" ON NO. 7.

1. The health and welfare of the people of the state depend upon an abundant supply of wholesome food. If the anti-vivisection measure is adopted the means by which farmers now stop the spread of chicken cholera, hog cholera, anthrax, scab, blackleg, Texas fever, lumpy jaw, etc., the means by which feeding and breeding experiments are scientifically conducted, the means by which the cause and remedy for botulism and other food poisons are discovered, would be permanently prohibited. This means less food, dearer food and more dangerous food.

2. The serum and a virus to protect hogs against cholera, like many other valuable remedies, were developed through animal experimentation by the United States Bureau of Animal Industry. Losses from hog cholera alone have been reduced 60 per cent through animal experimentation—a saving of $41,000,000 per annum.

3. Animal experimentation is the foundation of bacteriology. Without it you can not have safe milk.

4. You don't want your children to get tuberculosis from tuberculous cattle. You don't want them to suffer and die of laryngeal diphtheria. The eradication of tuberculosis among food producing animals is impossible without tuberculin; and without antitoxin many children must choke to death. Anti-toxin, tuberculin, and an endless list of life-saving treatments would be prohibited by the inhuman anti-vivisection act.

5. Whether you estimate the value of animal experimentation in food, in clothing, in money, in suffering relieved or lives saved, it is of incalculable benefit. It has provided the veterinarian and sanitarian with the powerful means of relieving suffering and preventing and controlling disease. It is the basis of sanitary campaigns. It led the way to conquer yellow fever, malaria, typhoid, typhus, bubonic plague and smallpox. It discovered the specific cures for diphtheria, hydrophobia, tetanus, syphilis, etc. This anti-vivisection act would stop the crusade against venereal diseases.

6. The safety of modern surgery, the practice and progress of modern medicine, depend upon animal experimentation; 95 per cent of animal experiments are to determine the strength, purity and safety of drugs that are used by your physicians, dentists and veterinarians for the benefit of man and animals. Anesthetics are used in animal operations the same as in operations on persons wherever the procedure would otherwise inflict pain. Anesthesia is a product of animal experimentation. This anti-vivisection act would prohibit anesthesia and make all operations on man and animals cruelly painful and horribly hazardous.

7. This anti-vivisection initiative would finally result in a permanent quarantine being placed against the State of California that would restrict the movement of cattle, sheep, hogs, poultry, and farm, garden and orchard products. We would be deprived of the scientific means of finding out for ourselves or proving to other States that California products were fit for human or animal food.

Vote "No" and defeat this destructive initiative.

8	**No. 8—Poison Act** was passed by the last Legislature and approved by Governor Stephens as an urgent measure to suppress illicit drug traffic and to control the growing narcotic evil. Certain drugless cults invoked the referendum to prevent the Poison Act from going into effect. Vote "Yes" and uphold the State law and State authorities.	Yes X No	Mark X Here

The Governor, the Legislature, Federal and State authorities, all the health authorities, thoughtful men and women in all walks of public and private life and leading newspapers recognize narcotic addiction as a public health menace and a public health responsibility.

Narcotic addiction besides causing crime and creating diseases, removes its many unfortunate victims from the ranks of producers.

It is estimated that over 1,000,000 habitual consumers of drugs in this country spend annually over $61,000,000.

The **First Step** to eradicate the narcotic evil in California was taken by the last Legislature when it passed the **Poison Act** which restricts the right to sell or prescribe opium, morphine, cocaine, heroin, etc., to responsible and qualified persons.

If you vote "No" on Number 8, and thereby abolish the Poison Act, you will be virtually voting to lower the bars and encourage unscrupulous drug peddlers and illegitimate "doctors" who help to increase the number of drug addicts.

For the general protection of society and the special protection of the unfortunate victims of habit-forming drugs, you should vote "Yes" and uphold the Poison Act.

Vote "Yes" on Number 8.

TUBERCULOSIS IN LOS ANGELES.

Health Commissioner L. M. Powers, in the recent monthly bulletin, says:

The Health Department, through its Nursing Division and the municipal clinics, is caring for approximately 1,458 cases of tuberculosis.

Of this number 826 are active cases, 561 suspected cases, and 71 are cases which have been dismissed as showing no further activitiy, but are kept under observation so long as they remain in the city and express their desire for this service.

These cases are distributed among 895 families consisting of 4,380 persons. 1,998 of these are adults and the remainder being children under 15 years of age.

In these 895 families are 1,277 wage earners, leaving 3,103 persons dependent upon the exertions of others, or upon the various charitable organizations for their existence.

The number receiving aid from local organizations is 1,038, not including 73 who are receiving aid from the state.

Of these cases under our care, 492, or 33%, were born in the United States; 607, or 42, were born in foreign countries, and 359, or 25%, are natives of California.

Of these 359 natives of California, 183 are suspects and 18 are closed cases, leaving only 158 active cases among the native born. Approximately 75% of those cases giving California as their birthplace are children whose parents have moved into the state either from other portions of the United States or from foreign countries. In taking the histories of these cases we learn that the disease has been prevalent in the families for two or three generations, and in a great many instances the parents came here as health-seekers. We see the foreign born parents of the native born children also enumerated as patients and attending the clinics, showing the parents have fostered the same conditions here which aided the development of the disease in other places.

Our patients hail from twenty-five different countries and as many different churches are represented.

Nor is the disease any respecter of age. Sixty-nine cases, or 5%, are between the ages of one and five; 278, or 18%, are between the ages of five and ten; 289, or 19%, are between the ages of ten and fifteen; 90, or 6%, are between the ages of fifteen and twenty, and 732, or 52%, are past the age of twenty.

EDITORIAL NOTES

Drs. Edward O. Palmer, W. W. Richardson and others are about to erect a magnificent hospital in Hollywood.

Dr. J. Severy Hibben, city physician of Pasadena and Miss Jess Williams of New York, were married in Pasadena on Sept. 11, 1920.

The Agnew Hospital of San Diego was recently closed. It has been one the stable **and important** institutions of that city for many years.

Dr. W. T. McArthur, Dr. Walter V. Brem and Dr. Wm. Duffield are doing wonderful work in leading the fight against the Four Quack Bills.

The Los Angeles Examiner is backing up a movement to establish a home and hospital for drug addicts on one of the islands opposite the coast of Southern California.

The infant mortality for 1919 in San Francisco was 65, while in Los Angeles it was 67, New York City 83 and Philadelphia 90. Brookline, Mass., had the lowest mortality rate which was 40.

Dr. M. A. Bennette of San Bernardino has been spending several weeks in Honolulu, taking a much needed rest.

Dr. J. Mark Lacy has taken offices in the Los Angeles Trust and Savings Building and is limiting his practice to internal medicine.

Dr. Edward H. Anthony has returned from San Francisco and permanently located in suite 314-15 Merchants National Bank Building.

Dr. L. M. Ryan, for years a practicing physician at Banning, and also the owner of a sanitarium for the tuberculous in that place, died at Glendale, August 19, 1920.

Surgeon General H. S. Cummings, head of the United States Public Health Service, recently investigated conditions at the government hospital at Arrowhead Hot Springs.

The picnic of the Los Angeles County Medical Association, under the general management of Dr. Wm. Duffield, was a great success and will doubtless become an annual affair.

Dr. Olga McNeile, recently came near death, due to severing the radial artery, but prompt action on the part of Dr. Lysle McNeile, saved her life and she is now in her usual health.

Dr. Frank W. Hodgdon was recently elected school physician by the Board of Education of Pasadena. He is a graduate of Harvard Medical College and was a medical officer of the Army during the war.

The California State Board of Health has been alarmed at the increasing number of cases of typhoid fever in California and at their October monthly meeting, placed it on the list of communicable diseases to be reported and to a certain extent to be quarantined.

Dr. J. W. Wright, a retired physician of Santa Monica, age 61 years, died suddenly in August. A note, written by himself that was found after his death indicates that he committed suicide. He was suffering from an incurable ailment which caused him great pain.

Drs. J. Rollin French and C. E. Early have purchased the Crocker Street Hospital of a company of which Dr. Ernest A. Bryant was the president and chief stockholder. The hospital will be renamed and remodeled and devoted especially to accident and compensation work.

Dr. Edith Lamoree of Ventura, who was physician to the State School for Girls, died in the Bard Hospital on the night of Sept. 16th. Dr. Lamoree graduated from the Cooper Medical College, San Francisco in 1894 and was a physician of ability and highly esteemed by the profession.

Dr. Philip S. Van Patten, age 48 years, died recently at the La Manda Park Sanitarium, Pasadena. He was a graduate of Columbia University and came to Los Angeles ten years ago after his health failed in practice in New York. He was a member of the usual medical associations and of the University and Athletic Clubs of Los Angeles.

Dr. Walter Sydney Johnson, age 48 years, died suddenly at his home in Los Angeles on Sept. 17. He was a member of the Los Angeles Harvard Club, the University and the Athletic Clubs. He served with honor during the war As a young man he was prominent at Harvard University, not only for his scholarship, but as an athlete, being prominent as an oarsman and rowing with the 'Varsity crew against Yale in 1893.

Dr. John C. Ferbert has been suffering for several months from an ob

scure spinal condition. After exploratory operation on the cord, which did not display any very definite pathological condition, he made a decided improvement. From present prospects it is thought he will be himself soon. Dr. Ferbert stands A-1 with the profession as well as with the community at large and his recovery is the cause of great joy.

Dr. Milbank Johnson, the well known Los Angeles physician and Miss Isabell Simeral, a noted welfare worker, were married on Sept. 8th at the home of the bride's sister in Altadena. Dr. Johnson was a graduate from the University of Southern California in 1892.

The total consumption of wines and liquors in 1918 was 1,701,827,271 gallons or 15.05 per capita, while in 1919 under the prohibition law it was 992,394,720 gallons or 9.17 gallons per capita, says the recent report from Washington by the Department of Commerce.

John Johnson Kyle, Los Angeles; Miami Medical College, Cincinnati, 1889; age 51; professor of rhinology, laryngology and otology in Indiana University from 1900 to 1912; and in the College of Physicians and Surgeons, University of Southern California, since 1913; major and surgeon of the One Hundred and Sixtieth Indiana Volunteer Infantry; and acting brigade surgeon during the war with Spain, with service in Cuba; major, M. R. C., U. S. Army, and discharged Jan. 1, 1918; president of the American Academy of Ophthalmology and Oto-Laryngology in 1910 and 1911; a member of the Association of Military Surgeons of the United States; author of a Compend of Diseases of the Eye, Ear and Throat, and a Manual on Diseases of the Ear, Nose and Throat; died, August 29, from pneumonia. The above recites briefly the life and death of an able, lovable man. He, with his mother and two sisters, came to Los Angeles seven years ago. Within two years he had phenomenal practice, particularly in the surgery of ear, nose and throat. The profession of Southern California believed in him and his offices were crowded with referred patients. Socially he was delightful and popular. His mother and sisters have the deep sympathy of the profession.

Dr. Henry O. Eversole of Los Angeles, who has been doing American Red Cross work in Russia for the last three years, had charge of the Children's Ark, a big freighter that brought 800 exiled children who had been absent from their homes for more than two years from Vladivostok to San Francisco and then to New York. These children range in age from 5 to 18. They were exiled two years ago when the Bolshevist depredation became especially ferocious. Dr. Eversole, with a staff of four physicians and a corps of 14 nurses, took the children through the Panama Canal to New York, from whence they were sent to France. The French nation has offered to mother these children for the balance of their childhood and this generous offer has been accepted. Dr. Eversole last year was in charge of the American Red Cross hospitals for Czecho-Slovak soldiers in Siberia. He also accompanied the first shipload of invalid heroes on their journey from Vladivostok to Prague. The Czecho-Slovakian government has signified its intention to decorate him for his services, and his diary of the journey to Prague has been printed by the new republic and is being distributed among its soldiers. The little booklet, because of its sympathetic character, and its vivid picturization of conditions in the homeland, is considered by the Czecho-Slovak command as of inestimable value and comfort to the war-weary lovers of freedom.

MISCELLANEOUS

A DECISION OF INTEREST*

Judge Dana R. Weller of the Court of Appeals has just rendered an opinion, the first of its kind, in this or any other state, and it is as follows:

Georgle L. Cole,

vs.

Matt A. Wolfskill et al.

Appeal from the Superior Court of Los Angeles County—Chas Monroe, Judge.

This appeal is from a judgment entered on an instructed verdict. The complaint alleged that the decedent in her lifetime executed to plaintiff her promissory note for the sum of $12,500, and that a claim based on such note was presented to the defendants, as executors, and rejected. In the answer defendants pleaded the relationship of physician and patient between the decedent and plaintiff, and that the execution of the note was procured by undue influence and without adequate consideration.

From the testimony of witnesses at the trial, it appears that decedent was a widow, about seventy-one years of age, and without business experience until after her husband's death, when she administered his large estate, with the assistance of agents and attorneys. She was of a confiding and generous disposition, possessed of a strong will, and was bright, capable and clear-headed. The plaintiff had been for many years her family physician, and a neighbor; but, though their relations were very friendly, there was nothing of a business nature between them prior to the execution of the note in question, except with regard to his fees, which she had paid. In May, 1915, the doctor amputated one of decedent's legs, with the assistance of three other physicians whom he called for the purpose. Mrs. Wolfskill recovered sufficiently from the effect of the operation to make a trip to the Orient, accompanied by a servant, returning some time in December, 1915. Subsequent to her return she contracted the illness which resulted in her death, in January, 1916. During her convalescence after the operation, and in the month of July, 1915, the doctor visited decedent one day, and in the presence of the nurse, jokingly inquired of Mrs. Wolfskill how much he owed her for his visits, to which she responded by inquiring how much she owed him. At this point the nurse left the room, and did not hear the conversation that ensued. Several days later the doctor again called, bringing with him the note, which Mrs. Wolfskill signed. At the time of the signing of the note decedent offered to secure payment thereof by a mortgage on her Pasadena home, which offer, however, the doctor rejected, stating that her signature would be sufficient, and that she should keep her home clear. The doctor also informed Mrs. Wolfskill that he had paid the other physicians; and delivery of the note to him, gave her a receipt for $12,500 for professional services, which, by its terms, included payment of the three assistants. After his departure, Mrs. Wolfskill remarked to the nurse that she thought the charge reeasonable, that she would not have been surprised if it had been $20,000, and expressed appreciation of what the doctor had done for her.

The two sons of the decedent, executors of will, testified that their mother had a clear, strong mind, a positive character, and that she was a good house manager. She had administered her husband's estate, which was appraised at $2,600,000, in a satisfactory manner, and no criticism was made of the conduct of any of her business affairs. From this undisputed testimony it is sufficiently established

that Mrs. Wolfskill was fully capable of contracting; that the plaintiff had rendered her valuable services; and that the note was voluntarily executed by her in settlement therefor, in the belief that the charge was reasonable. There was no evidence introduced tending to show any incapacity or weakness of mind on the part of Mrs. Wolfskill, or that she was unduly influenced by the doctor in making the note.

It is contended by appellants that by reason of the proof that the note was executed by a patient to her physician during such relationship, the presumption arose that it was obtained by undue influence and without sufficient consideration, and that the burden then shifted to plaintiff to prove that the transaction was voluntary and based upon an adequate consideration.

It undoubtedly is the established rule that the relation of physician and patient is confidential; and the law demands the strictest good faith and fair dealing in all transactions arising from that relationship. Once this relation is shown to exist, all dealings between the parties will be closely scrutinized to ascertain if the confidence of the trusting party has been betrayed, or his mind unduly influenced to his prejudice. But when satisfactory proof has been made that a person has freely and voluntarily disposed of his property in accordance with his wishes, and his capacity and volition are apparent, the existence of the confidential relation will not prevent the consummation of his desires. (Estate of Wickes, 139 Cal. 195).

Under the provisions of section 2235 of the Civil Code, all transactions by which a trustee obtains any advantage from his beneficiary are presumed to be entered into by the latter without sufficient consideration and under undue influence. It has been held that the fact must be alleged and proved that the client has suffered some injury through the abuse of confidence by his attorney. If it were enough to show that a contract was entered into during the relationship, and that thereupon the presumption would arise that it was fraudulent, it would follow either that all contracts between an attorney and client or physician and patient are voidable, or that a party is entitled to relief on the ground of fraud without showing that damage resulted from the fraud. (Kisling v. Shaw, 33 Cal. 425.) A written instrument is presumptive evidence of consideration (1614, Civ. Code); and the burden of showing want of consideration to support an instrument lies with the party seeking to invalidate or avoid it (1615, Civ. Code). To overcome the presumption of consideration evidenced by a witing, it is not sufficient to show merely that the confidential relation existed, but it must be made to appear that the relationship was used to obtain an unfair advantage, or that the confidence was violated. (Dimond v. Sanderson, 103 Cal. 97.) The rule is less stringent where it appears that the trustee was not advising the beneficiary in the conduct of business, but assumes a hostile attitude, and is urging the payment of a debt due himself. (Johnson v. Fesemeyer, 3 DeG. and J. 22.)

The result of a drastic application of the rule invoked here would be to preclude a physician from bargaining with a patient in regard to his fees, and to deprive persons occupying confidential relations of the power of contracting with each other for compensation, which, in all cases, would of necessity be fixed by a court or jury regardless of the circumstances under which the parties arrived at an agreement between themselves.

Counsel argues that it does not appear in this case that Mrs. Wolfskill was informed as to the amounts paid to other physicians, or what services

*The Supreme Court has since confirmed this decision of the Court of Appeals.—Editor.

were performed by the plaintiff, although peculiarly within his knowledge. It must be borne in mind that this is an action to recover a debt due from an estate; and the lips of the plaintiff are sealed as effectually by the terms of section 1880, C. O. P., as the voice of the decedent is stilled by the grim reaper. What he knows can never be revealed to an earthly tribunal; and what occurred between the parties must ever remain undisclosed to mortal judge.

But it does not appear by the undisputed evidence that the decedent was in full possession of all her faculties, acting freely and voluntarily, with knowledge of all the doctor had done for her during her illness; and in grateful appreciation of his services she executed the note in payment of his account, believing it to be a reasonable charge. In the absence of undue influence, the adequacy of the consideration is immaterial. (Silveria v. Alexander, 25 Cal. App. 506.)

Under the circumstances, we are of the opinion that the trial court was justified in its instruction to the jury to find for the plaintiff.

Judgment affirmed.

Weller, J.

We concur:

Finlayson, P. J.

Thomas, J.

(Boldface ours.)

SOUTHERN CALIFORNIA PRACTITIONER.

Vol. XXXV. LOS ANGELES, NOVEMBER, 1920 No. 11

HYDATIDIFORM MOLE*

BY FRANCIS L. ANTON, LOS ANGELES, CAL.

In October, 1918, Mrs. S. was sent to me on account of repeated, sharp uterine hemorrhages during the two weeks preceding her entry into the hospital. She was nearly four months' pregnant, and it was thought that she was having a miscarriage. This patient was a healthy primipara, 26 years old, with a negative family, as well as personal history. Her husband also was a healthy young man. Her pregnancy had been marked by considerable nausea and vomiting and considerable pain in the abdomen all the time. There was some swelling of the feet, but her urine was negative. She had a moderate degree of anemia. Temperature normal. Pulse 100.

On examination the uterus reached up to the umbilicus. This was too high for a four months' pregnancy. Digital examination of the vagina revealed a very soft cervix with a good two fingers dilation, and a considerable amount of bloody discharge of a rather light color. She was having regular and severe labor pains. Immediately after the examination she expelled a handful of the characteristic vesicular mole, the cysts being about the size of small grapes. I ordered her to the operating room at once. While on the cart she expelled about a pint more of the same growth with profuse bleeding. As soon as she was placed on the operating table, and before she could be etherized, I massaged the uterus slightly and then she expelled about a hatful of the hydatid mole. I then curetted, at the same time being mindful of the thin uterine walls. Then I made a thorough digital examination of the interior of the uterus, and finding it smooth and clear of all growth, gave it a thorough irrigation with hot lysol solution. By this time the uterus had contracted well, and bleeding had practically ceased. Then I instructed her family physician to watch her very carefully during the following two or three months for any enlargement of the uterus, advising him, that if any such enlargement should occur, to bring her back for total hysterectomy.

For a month there was no show of blood; then followed three apparently normal menstruations, and during this time the uterus remained normal in size. After that menstruations ceased and the

*Read before the Los Angeles Obstetrical Society, November 9, 1920.

uterus began to enlarge. I was sent for to decide what was up. I confess that I was quite uneasy, but examination showed the uterus not abnormally large, and I decided that it was a normal pregnancy. Until about the fifth month of her pregnancy I examined her frequently, but it was not until fetal movements could be positively made out that I could convince her family physician that all was well.

The pregnancy progressed quite normally and at term she had a perfectly normal confinement, being delivered of a healthy male child which weighed seven pounds. The placenta was normal. This was thirteen months after the removal of the hydatidiform mole. Since then she has remained perfectly well.

This is the third case of hydatidiform mole that has come under my direct observation. The other two were seen a good many years ago. They had much the same symptoms, but they were multiparae and past thirty-five years old. They were also treated by simple curettage, and have remained well since, but neither of them became pregnant afterwards.

These results are very fortunate, but we must admit that they are sheer luck both for myself and my patients.

Vesicular degeneration of the chorion is a very serious pathologic change, often causing an invasion, thinning, or even perforation or rupture of the uterine walls; and frequently it does assume all the characteristics of a true malignant tumor even to metastasis, as in chorio-epithelioma. According to De Lee 50 per cent of chorio-epitheliomata give a history of cystic mole.

Hydatidiform mole is undoubtedly much more common than is generally realized by obstetricians. Its frequency is variously stated as from one in ten thousand to one in six hundred pregnancies. It is most often mistaken for placenta previa or threatened abortion, sometimes echinococcus disease of the uterus. It can be differentiated by the appearance of vesicles only. De Lee reported some time ago fourteen cases, Koenig twelve, Kehrer fifty. Palmer Findley in 1917 analyzed five hundred cases (out of two hundred and fifty cases 16 per cent developed chorio-epithelioma). Arthur W. Meyer in 1918 reports a large number of cases, and points out the frequency of early abortion when mole is overlooked.

My anxiety and responsibility in the case which I reported above in detail lead me to investigate

1. Are there different varities of Cystic Mole?

2. Can we tell by microscopic examination of the scrapings whether we have a malignant or nonmalignant degeneration of the chorion?

Histologically vesicular degeneration of the chorion is due to proliferation and degeneration, with edema, of the stroma of the chorionic villi and increase of the syncytium. In the villi the cells of Langerhaus, as well as of the syncytium, proliferate markedly. The syncytium may grow through the decidua into the muscularis of the uterus and even through the whole of the uterus into the peritoneal cavity. Some destructive hydatidiform moles eventuate into chorio-epithelioma or malignant syncytioma.

We have therefore three varieties of hydatidiform mole:

1. Simple Hydatid Mole—not invasive.

2. Invasive or destructive moles, where, according to Poso, we have invasion of the myometrium by both constituents of the chorion, the ectoderm and mesoderm.

3. Chorio-epithelioma, which is a malignant tumor springing from the fetel ectoderm, is exclusively constituted by the epithelial elements of the chorion.

As to the microscopic differentiation:

Hydatidiform Mole is represented by the absence of fetal capillaries in the

villus, mucus edema of the villus, resulting in the formation of the vesicle; excessive prolification of the epithelium, especially of the syncytium, which shows abundant vacuolization (edematous hyperplasia of the syncytium [Durante]). A primary disease of the vascular system of the villus an endarteritis. But molar degeneration often occurs at the earliest stages of development of the villus when the vascular system is entirely absent. In the average specimen of hydatidiform mole the epithelial proliferation develops mainly at the expense of the syncytium.

Frassi has this to say: The presence of a connective tissue core in the villus marks it as a hydatidiform mole: the absence of a connective tissue core is interpreted as an established degeneration into chorion epithelioma.

Caturani, after an exhaustive study of these conditions, comes to the conclusion that the histologic evidence of hydatidiform mole can only be considered presumptive, but not pathognomonic of malignant evolution. In other words, a very suspicious significance should be attached to the overproduction of young syncytium, to the cellular transformation of the same, but above all to the presence of cells of Langerhans in active mitosis, and the marked tendency of the epithelial elements to form masses independent of the core of the villus, reducing the core to limited proportions.

Clinically the cause of Hydatidiform Mole is not known. It may be caused by endometritis or perhaps it is a primary disease of the ovum itself.

Treatment: As soon as diagnosis is made evacuate the uterus. Palmer Findley says: Inasmuch as but a small percentage of cases will be completely delivered spontaneously it is wise to follow the expulsion of the mole by passing a curette lightly over the decidual surface. Howard Taylor advises hysterectomy when mole formation occurs near the menopause, and in women who possess the desired number of children. (He observed 16 per cent of moles undergoing malignant changes.) After curettment the patient should be kept under observation for years. If menorrhagia occurs, we curette and examine the scrapings microscopically. In case of doubt hysterectomy should be performed.

DON'TS OF DERMATOLOGIC THERAPEUTICS

BY MOSES SHOLTZ, M. D., LOS ANGELES CAL.

1. Do not use salves in weeping eruptions. Lotions are more convenient and comfortable.

2. Do not use phenol or any other antipruritics to relieve itching in acute inflammatory dermatoses. Bland and soothing applications will do at least as well, and will not increase the irritation.

3. Do not use chrysarobin on the face and scalp as it is likely to set up a violent conjunctivitis; substitute it with the white precipitate ointment.

4. Do not use resorcin on a scalp with blond hair. It may discolor it green.

5. Do not prescribe simply "Lassar Paste" when you want a coating bland base, as druggists commonly combine it with salycilic acid and sulphur; but specify "Original Lassar Paste." Or, better yet, write out the whole formula: Zinci oxidati, amyli tritici, aa15.0; vaselini, lanolini, aa30.0.

6. Do not use vaseline as a base for protective ointments in summer, as it readily melts in warm weather from the body temperature. Use lanoline, zinc ointment or Lassar Paste.

7. Do not push sulphur or any other parasiticide in scabies until all itching is gone. Remember that itching in scabies can be kept up by a secondary dermatitis due to the over-treatment or by the scratching habit in neurotic individuals.

8. Do not be shy of water and soap in skin diseases, except in acute and sub-acute eczema. Even at that, remember that all varieties of eczema do not make up more than 20 per cent of all skin diseases.

9. Do not regard arsenic as a panacea in skin diseases. It is contraindicated in all varieties of eczema and has the main value in chronic dermatoses with neuropathic or nutritive background, such as psoriasis, dermatitis herpetiformis, lichen planus, etc.

10. Do not forget that the use of arsenic should not be kept indefinitely, as it may induce generalized pigmentation and keratoses of the hands and feet with possibilities of a malignant degeneration.

11. Do not forget also, that quinine is a very valuable remedy in various dermatologic conditions, such as chronic urticaria, lupus erythematosus, dermatitis exfoliativa and bullous septic eruptions. It can be used internally, or, better yet, hypodermically or intravenously.

12. Do not use sulphur and tar indiscriminately one for another. They both are parasiticides and can be used in scabies and ringworm, but otherwise they have well defined indications. Sulphur excels in affections involving the sebaceous follicles and is a drug of choice in seborrhea and acne. Tar is particularly efficient in promoting the absorption of chronic inflammatory infiltrates of the deeper layers of the skin and is to be preferred in chronic eczemas, lichen planus, prurigo, etc.

13. Do not forget that while salycilic acid and resorcin in strong concentration of 5-15 per cent produce a peeling keratolytic effect; in small doses of 1-3 per cent they have the opposite keratoplastic effect and promote the growth of epithelium.

14. Do not overestimate the importance of the constitutional treatment at the expense of the local, or vice versa, but judge the individual case on its own merits. The best results in the majority of the cases are obtained by the combination of both.

THE TREATMENT OF SHOCK

That the surgeon has in Adrenalin a dependable means of combating shock has been known to the profession for a number of years. As long ago as 1909 Mummery and Symes announced their observations on the effects of Adrenalin upon the blood pressure and recommended its use by the slow and continuous injection of a very weak solution into a peripheral vein. They also found that the action of Adrenalin is enhanced by the coincidental administration of pituitrin, this procedure producing a more marked effect in shocked animals than in normal subjects.

In our advertising section, under the title "Adrenalin in Medicine," will be found a brief review of the plan of treating shock with highly diluted solutions of Adrenalin Chloride, by intravenous infusion and by "centripetal arterial transfusion," after the method of Crile.

This little essay is the third of a series of concise and informative papers published in this rather unconventional form by Parke, Davis & Co. We have no hesitation in commending these meritorious articles to the consideration of our readers.

The Mother Cabrini Preventorium, an institution for young girls with a tendency to tuberculosis, established by the Roman Catholic Church, was opened on October 21. The Chief of the Medical Staff is Dr. C. C. Browning with several able assistants.

SOUTHERN CALIFORNIA PRACTITIONER.

A MEDICAL, CLIMATOLOGICAL AND SOCIOLOGICAL MONTHLY MAGAZINE.
This journal endeavors to mirror the progress of the profession of California and Arizona.

Established in 1886 by Walter Lindley, M.D., LL.D.
DR. GEORGE E. MALSBARY, Editor and Publisher.

Associate Editors,
Dr. Walter Lindley, Dr. W. W. Watkins, Dr. Ross Moore, Dr. George L. Cole,
Dr. Cecil E. Reynolds, Dr. William A. Edwards, Dr. Andrew W. Morton,
Dr. H. D'Arcy Power, Dr. B. J. O'Neill, Dr. C. G. Stivers,
Dr. Olga McNeile, Dr. W. H. Dudley, Dr. J. M. Mathews.

Address all communications and manuscripts to
EDITOR SOUTHERN CALIFORNIA PRACTITIONER,
Suubscription Price, per annum, $1.00. 1414 South Hope Street, Los Angeles, Cal.

EDITORIAL

MEDICAL BIOGRAPHIES

In 1912 the W. D. Saunders Company issued a large two volume cyclopedia of American Medical Biographies by Howard A. Kelly. This work of Dr. Kelly's received instant appreciation and became a standard work of reference.

Now after eight years Dr. Kelly, assisted by Dr. Walter L. Burrage, issues a revised and practically new work entitled "American Medical Biographies," published by the Norman, Remington Company of Baltimore. This is almost an ideal publication for the purpose intended. In the index showing the number of biographies from each state, the California list has 15 from San Francisco and one from Los Angeles.

Doctors Joseph Henry Wythe, Hugh Hughes Toland, S. O. L. Potter, John W. Palmer, Beverly McMonagle, Jonathan Letterman, Joseph and John LeConte, Levi Cooper Lane, Albert Kellogg, Philip Mills Jones, Stephen Solon Herrick, Wm. P. Gibbons and Drs. Henry Gibbons, Jr. and Senior, Richard Beverley Cole, John Mills Browne and Winslow Anderson are the 15 from San Francisco, while Dr. Francis L. Haynes is the only one from Los Angeles. Doctors F. T. Bicknell and E. R. Smith should at least be in this list with Dr. Haynes. We do not know who represented Dr. Kelly in Southern California, but these two men should stand out as very able pioneer surgeons, and deserve a place with Dr. Haynes in every American Medical Biography. There are numerous evidences of rather careless proof-reading; for instance, note in the life of Winslow Anderson, it says he was a Surgeon-General of the National Board of California, when of course it should say "National Guard of California." In the biography of Dr. Haynes it says, "Dr. Haynes devoted much attention to the training of nurses on the Pacific Coast, a matter that had received little attention there in the seventies." Of course, it should be in the nineties. These are small defects in a valuable work, which should be in every Medical

and every Public Library in the United States. No library can be complete without this work and we unreservedly recommend it.

THE QUACK QUARTETTE

The recent election showing about 200,000 majority against the Anti-Vivisection Amendment; 100,000 majority against Anti-Vaccination; 40,000 majority against a Chiropractic Board of Examiners and a large majority in favor of the Poison Law, gives great satisfaction to scientific people whether medical or lay. The medical profession worked solidly together at great loss of both time and money to achieve this victory for the people and for science.

Drs. W. T. McArthur, Wm. Duffield and W. V. Brem, stand out as the members of the profession in Southern California who made the greatest effort and really gave up their professional work for a few weeks to this great cause. Los Angeles County gave a large majority in favor of the Quacks, as far as the proposed Chiropractic law is concerned. It is said that the Chiropractors spent one million in their campaign and Los Angeles County was the center of their fight. On the other hand, it is said that the medical profession of Los Angeles subscribed and sent $5000 to the Society for the Conservation of Public Health, and that of this $5000 which was sent to San Francisco, only $340 was spent in Los Angeles County. This victory should teach the medical profession that it is worth while to organize and work together and they should not settle down complacently, but should keep up their organization in a most efficient manner for future work. The Society for the Conservation of Public Health should have two great units: One in San Francisco with its secretary and one in Los Angeles with a local secretary, and all funds raised in the South, should be spent in the South.

We trust that the Medical Profession will never forget the valient work which Judge Walter Bordwell has done in their behalf and in behalf of humanity at large during this time of stress. He has without financial reward, given his great ability to the cause of science, and his paper read before the Sunset Club, that appeared in the Southern California Practitioner for October, has been of great value to the cause. We suggest that Judge Bordwell be elected an Honorary Member of the Los Angeles County Medical Society; of the Southern California Medical and of the California State Medical Society.

He deserves every expression of regard and gratitude that it is possible for us to extend to him.

Some Observations on Pellagra is a reprint by Drs. Geo. G. Hunter and Edward Huntington Williams of Los Angeles.

Radium in the Treatment of Malignant Conditions of the Bladder and Prostate by Rex Duncan, 1151 West Sixth street, Los Angeles. Dr. Duncan has reached the position where he is considered one of the great radium experts of America.

In the "Southwestern Medicine" for September, Dr. W. G. Randall of Florence, Arizona, reports six cases of Botulism, due to eating canned beets, served raw with a little vinegar. Five of these cases died; one of these living five days and another six. Dr. Randall says as yet antitoxin is of little or no value, and supportive treatment is very disappointing.

Dr. Brock Edwin Cohoon, eye, ear and throat specialist from Seattle, died at Santa Monica on October 21. He was thirty-five years old and came to Santa Monica on account of his health.

Dr. Joseph Choate of Los Angeles has been spending four months in Paris. He arrived home about the middle of October.

EDITORIAL NOTES

Dr. Hugo Kiefer has been elected to the American College of Surgeons.

Dr. C. L. Curtiss is President of the San Pedro County Medical Society.

Dr. Walter Parry Guy has taken offices in the Baker-Detwiler building.

Dr. E. H. Thompson of Burbank has been elected a member of the American College of Surgeons.

Dr. M. A. Schutz, formerly of Long Beach, who is an alumnus of the Medical Department of the University of Southern California, is now located in Elsinore and is in charge of the Elsinore Sanitarium.

Dr. Harvey W. Wiley, for thirty years the head of the Government's Pure Food Bureau, spent a few days in Southern California, making several speeches in opposition to the proposed Anti-Vaccination law and Anti-Vivisection law.

Miss Mable Hagerman, who has been Head Maternity Nurse of the California Hospital since January, 1912, has resigned and returned to her home at Niagara Falls, Canada. During her service of 8 years, her department has chronicled the birth of 3126 babies. Miss Hagerman's service has been very satisfactory and she has made a record of freedom from infection or other post-partum complications that probably has never been surpassed.

At the 63rd Semi-annual meeting of the Southern California Medical Society, held at the Gamut Club, 1044 South Hope Street, Los Angeles, on November 5th, Dr. Chas. L. Bennett of San Dimas was elected President; Dr. Edgerton Crispen, Los Angeles, was elected Vice-President; Dr. L. C. Kinney, San Diego, Second Vice-President, and Dr. William Duffield, Los Angeles, was re-elected Secretary and Treasurer.

Judge Valentine of the Los Angeles Superior Court on November 10th gave judgment for non-suit in the $16,000 action brought by E. B. Spencer against about 100 physicians. All the defendants were subscribers to the building fund raised by the Medical Building Corporation. This, we trust, is the last of this great but disastrous enterprise, which through the lack of carefully watching details in the original contract, and through the apparent over-reaching of certain financial institutions was a sad failure. The proposition by close, keen business management might have proven a great success.

Dr. Alonzo P. Williamson, formerly Superintendent of the California State Hospital for the Insane at Patton, was found dead in his bed at his home in Santa Monica on October 21. He was 66 years old, having been born in Philadelphia. Angina pectoris was given as the cause of his death. Dr. Williamson had also been an official of the New York State Hospital in Minnesota. He graduated from the Hahnemann Medical College of Philadelphia in 1876. He leaves a widow, a daughter and a son.

The Los Angeles Medical Association at its meeting on October 26, 1920, elected the following new members: Percy William Seals, M. D., 906 Black Bldg.; Olaf A. Kvello, M. D., 1400 Hobart Blvd.; Eugene R. Lewis, M. D., 1920 Orange; Oscar Coodley, M. D., 543 Brittania St.; W. C. Duncan, M. D., 419 Investment Bldg.; Isaac H. Jones, M. D., 448 Arden Blvd.; Frank W. Hodgdon, M. D., 301 Casa Grande Bldg.; Reuel M. Spencer, M. D., 624 Trust and Savings Bldg.; Webster F. Keller, M. D., Sawtelle—Reinstated.

On October 27th, the Olive View Sanatorium for tuberculous patients was dedicated by the Los Angeles

Board of Supervisors in the presence of about 500 interested citizens. This institution is about 25 minutes from Los Angeles in the hills overlooking the San Fernando Valley, at an altitude of about 1500 feet. It is the latest word for the tuberculous and cost Los Angeles County about $250,000. It is arranged now to accommodate 100 patients but the plant is so constructed that units may be added to take care of 500 patients. It is a group of six buildings, all of which are one-story structures. We commend this very advanced work of our Los Angeles County officials, in which they have had the hearty co-operation of the Bureau of Tuberculosis of the California State Board of Health.

BOOK REVIEWS

PRACTICAL ANATOMY. Revised and edited by Arthur Robinson, Professor of Anatomy in the University of Edinburg. Seventh edition, volume third, Head and Neck. With 233 illustrations, many of which are colored. New York, William Wood and Company; Edinburg, Glasgow and London. Henry Frowde and Hodder & Stroughton, 1920. Price $4.00.

In this edition the general text has been revised and many new figures, representing dissections, sections and radiographs, have been introduced. The instructions for dissection have been printed in a distinctive indented type; in many cases they have been rewritten and in some cases amplified. The latter changes, together with the additional figures, have caused an increase of size, and the present edition appears in three volumes: Vol. I, Superior Extremity and Interior Extremity; Vol. II, Thorax and Abdomen; Vol. III, Head and Neck. This is probably the best text extant for the dissector.

PATHOGENIC MICRO-ORGANISMS. A text-book of Microbiology for Physicians and Students of Medicine. By Ward J. MacNeal, Ph.D., M. D., Professor of Pathology and Bacteriology and director of laboratories in the New York Post-Graduate Medical School and Hospital, New York. (Based upon Williams' Bacteriology) with 221 illustrations. Second edition, revised and enlarged. Philadelphia. P. Blakiston's Son & Co., 1012 Walnut street.

In the preparation of this second edition the text has been revised throughout, but the changes have been in the nature of minor corrections and the addition of new matter to bring the text up to date. The general plan of the book has been preserved, keeping in mind its purpose as an introduction to the study of pathogenic micro-organisms. Subjects in controversy, such as the pathogenic role of Bacillus influenzae or Bacillus typhi-exanthematici, have received only brief mention, but some references to the literature have been given for the possible use of more advanced students. On the other hand more conclusive advances in microbiology, such as the recent studies on botulism, yellow fever, rat-bite fever and trench fever have been included in the text.

REPORT OF SMITHSONIAN INSTITUTION. Showing the operations, expenditures, and condition of the institution for the year ending June 30, 1918. Washington Government Printing Office, 1920.

The articles in the General Appendix add greatly to the value and general interest of these Reports. In this volume of the Reports there are twenty-seven such articles, many of which are of interest to medical men. The first deals with the marvelous story of helium (helios, sun) which was first discovered in the sun, and later in spectroscopic examination of some of the distant stars. With the advent of the Great War, the value of a non-inflammable gas, light enough to replace hydrogen in the aircraft, became painfully apparent. Helium was recognized as ideal for this purpose, but only about two cubic meters had been produced on earth at a cost of sixteen

hundred dollars per square foot. Then came the discovery of helium in large quantities in gas of certain wells in Texas and Oklahoma. From its impurities, the other constituents of the gas, helium was secured in pure form by liquifying the other constituents. Measured on the absolute centigrade scale, the temperature of the sun is about 6,000° to 7,000°; that of the earth about 285°; freezing water, 273°; liquid oxygen, 90°; liquid hydrogen, 20°; and liquid helium, 4°. Thus it will be observed that the liquifying point of helium is lower than that of the other gases. So we were able to secure large quantities cheaply, and at the time the armistice was signed a consignment of 150,000 cubic feet of helium was on the dock at New York, camouflaged as "argon," waiting to be sent to France for use in the balloons of the Allies. So far as is known, helium is absolutely incombustible, not uniting with any known substance. But you must look over the articles in the appendix of the last volume of the Smithsonian Reports; they are intensely interesting, but we haven't room to review all of them.

STATE BOARD QUESTIONS

HYGIENE AND SANITATION

Physicians and Surgeons, October 19, 1920
H. E. ALDERSON, M. D.
San Francisco, Cal.

1. What progressive sanitary measures would anti-vivisection legislation prevent?
2. Discuss prophylaxis against lues.
3. Discuss the Schick reaction.
4. Discuss briefly factors that predispose to develop occupational dematoses.
5. Discuss quarantine of scarlatina.
6. Discuss proper quarantine measures to be carried out with ships, crew and passengers arriving from overseas.
7. How may typhoid cases be "isolated" in an open ward?
8. Discuss the proper care of a patient with ringworm to protect others.
9. Discuss the proper care of a patient with diphtheria to protect others.
10. Discuss briefly results of various kinds of prophylactic vaccination, as demonstrated in the recent war.
11. How can contaminated water be made safe for drinking purposes?
12. How is Anthrax infection usually contracted?

(Answer ten questions only.)

HYGIENE AND SANITATION

Drugless Practitioners
October 19, 1920
H. E. ALDERSON, M. D.
San Francisco, Cal.

1. How contagious is smallpox?
2. Discuss quarantine of whooping cough.
3. When is syphilis the most infectious?
4. Name five occupational diseases and discuss briefly the causes.
5. How is tetanus infection contracted? How prevented?
6. What are the main common means of conveying infections?
7. Discuss the role of drinking fountains in spreading disease.
8. What is certified milk?
9. How is tuberculosis usually contracted?
10. Why is hot weather bad for infants? Discuss fully.
11. How would anti-vivisection legislation favor the spread of infectious diseases?
12. Discuss sanitary measures that protect children in school against various contagious diseases.

(Answer ten questions only.)

HYGIENE AND SANITATION

Midwives
October 19, 1920
H. E. ALDERSON, M. D.
San Francisco, Cal.

1. Discuss prevention of ophthalmia neonatorum.
2. Discuss proper sterilization of scalpels and scissors.
3. Discuss the dangers of a streptococcus infection.
4. How should one's hands be sterilized?
5. What effect would the adoption of anti-vivisection legislation have on progress in sanitation?
6. How may a midwife contract syphilis?
7. Why should anti-expectoration laws be rigidly enforced?
8. Discuss bathing during entire period of pregnancy.
9. Discuss feeding a newborn infant the first two weeks.
10. What is vernix caseosa?
11. How should the room be ventilated during labor?
12. If you called on a woman in labor, having smallpox, what would you do?

(Answer ten questions only.)

OBSTETRICS AND GYNECOLOGY

Physicians and Surgeons and Drugless Practitioners
HARRY V. BROWN, M. D.

1. (a) Make sketch of pelvis indicating position of foetus in transverse presentation.
   (b) What are the chief diagnostic points in shoulder presentation?
2. Discuss fully asphyxia neonatorum, including causes, premonitory signs and prophylaxis.
3. Discuss simple flat pelvis as to cause, pathology and mechanism of labor.
4. Give the indications for (a) Podalic version, (b) Cephalic version.

5. (a) Give the initial treatment of suspected gonorrheal infection in the female. (b) Subsequent treatment if diagnosis is confirmed. (c) Prognosis.
6. Describe the treatment of puerperal septicemia.
7. Give detail treatment of threatened eclampsia at the thirty-sixth week of pregnancy.
8. Give the minute pathology of chronic leucorrhea. Discuss use of cautery and radium in treatment of same.
9. Give differential diagnosis between right sided appendicitis and right sided adnexal inflammation.
10. Outline treatment for acute gonorrheal salpingitis.
11. Discuss urethral carbuncle; give treatment in detail.
12. Discuss briefly membranous dysmenorrhea; its etiology, pathology and treatment.

(Answer ten questions only.)

BACTERIOLOGY AND PATHOLOGY
Physicians and Surgeons
October 20, 1920
LEMUEL P. ADAMS, M. D.

1. Give technique of testing the coagulation time of blood.
2. Give the usual location of multiple echinococcus cysts.
3. (a) What is Trichinosis? (b) Give the usual blood findings in same.
4. Describe the Necropsy technic in a chest examination.
5. Give the urinary findings in
   (a) An acute nephritis.
   (b) Renal tuberculosis.
6. What are the recognized types of Tubercle Bacilli?
7. Mention three diseases in which the question of secondary infection is of importance.
8. Give the etiology of
   (a) Vegetative endocarditis.
   (b) Celloid goitre.
9. What information may be gained by a duodenal rubber tube examination?
10. Mention the results that follow trophic disturbances of the skin.
11. Classify brain tumors and give relative frequency of each.
12. (a) Give the etiology of septic teeth. (b) Mention some of the possible results.

(Answer ten questions only.)

PATHOLOGY AND ELEMENTARY BACTERIOLOGY
Drugless Practitioners
October 20, 1920
LEMUEL P. ADAMS, M. D.

1. Mention some of the results occurring from septic teeth.
2. Differentiate osteo-myelitis and sarcoma of bone.
3. Give the etiology of aneurysms.
4. (a) Give name of a gas bacillus. (b) mode of infection.
5. What is shock?
6. Mention four of the bacterium that are normally present in the mouth and throat.
7. What is meant by the term "sepsis"?
8. (a) Mention two types of malaria. (b) Give the etiology.
9. Give the cause of enlarged glands.
10. (a) What is meant by a Wassermann Reaction? (b) A Widal Test?
11. (a) Mention the characteristics of the Streptococcus Group. (b) Staphlococcus Group.
12. (a) What is erysipelas? (b) Carbuncle?

(Answer ten questions only.)

PATHOLOGY AND BACTERIOLOGY
Chiropodists
October 20, 1920
LEMUEL P. ADAMS, M. D.

1. Mention three pathogenic bacteria.
2. Name two malignant tumors and give their location.
3. What is (a) ulcer, (y) plebitis?
4. How long does it take a nail to regenerate?
5. What is the matrix?
6. Define a felon—inflammation.
7. Describe best method of instrument sterilization.
8. How do wounds heal?
9. What is an ulcer—abscess?
10. How is bullion media prepared?
11. What is edema?
12. Describe local appearance of an osteo-myelitis.

(Answer ten questions only.)

CHIROPODY AND THERAPEUTICS
Chiropodists
October 19, 1920
ROBERT A. CAMPBELL, M. D.

1. Discuss infection of the nails.
2. Name the antiseptics used in chiropody and state when and how they are used.
3. Discuss the treatment of fallen arch.
4. Give treatment of bunion.
5. What causes varicosities of the feet?
6. Discuss causes of gangrene of feet.
7. Give technique for treatment of a hard corn.
8. What is hammer toe? Give causes and treatment.
9. Give treatment of burns.
10. Give treatment of ingrowing nails.
11. Discuss a local infection and give treatment.
12. Discuss the causes of ulcers affecting the feet.

(Answer ten questions only.)

MATERIA MEDICA, THERAPEUTICS, PHARMACOLOGY AND PRESCRIPTION WRITING
Physicians and Surgeons
October 19, 1920
ROBERT A. CAMPBELL, M. D.

1. Give symptomatology of Hyperthyroidism and define treatment.
2. Write a prescription for whooping cough in a child two years old, and give the indication for each ingredient.
3. Discuss the therapeutic possibilities of Belladonna.
4. Give symptomatology produced by Nux Vomica when given to the full physiological effect.
5. Discuss the care and treatment of a case of Scarlet Fever.
6. Discuss mechanical treatment of Pott's Disease.
7. Give three conditions causing abdominal pain and the medicinal treatment for each.
8. Discuss the cause and give treatment of nocturnal incontinence in children.
9. Outline the treatment for a case of peripheral neuritis.
10. (a) Why should normal urine be acid in reaction?
    (b) Name three drugs which will make it acid.
    (c) Name three which will make it alkaline.

11. Name three organotherapy products Give the therapeutic indications for each.
12. Discuss the therapeutics of (a) Hot water. (b) Cold water.

(Answer ten questions only.)

PHYSIOLOGY
Physicians and Surgeons and Drugless Practitioners
October 21, 1920
C. J. GADDIS, D. O.

1. State function and give location of three internal secreting glands.
2. What is fatigue?
3. (a) What is the physiology of hunger and of thrist?
   (b) How is life sustained for weeks when food is denied?
4. Give function of walls or coats of the stomach.
5. Describe the mechanism and physiology of phonation.
6. Describe and tell reasons for symptoms that may arise from a sacroiliac strain or subluxation.
7. Describe function of testes and prostate gland.
8. Discuss diet for three-year-old child.
9. A man weighing 150 pounds requires how many calories for sedentary life? How many for hard toil?
10. Why are antipyretics often contra indicated in fevers?
11. Discuss origin and fate of glycogen.
12. What are anti-bodies? Where created? And what is function?

(Answer ten questions only.)

PHYSIOLOGY, CHEMISTRY AND HYGIENE
Chiropodists
October 21, 1920
C. J. GADDIS, D. O.

1. Describe the skin and mention three of its functions.
2. What are the characteristics of good drinking water? What tests for same?
3. Diagram a cell and state chemical composition; how nourished?
4. What factors influence or control the sweat glands?
5. What is phagocytosis, osmosis, sebum, thermolysis, metabolism?
6. Give technique for collecting urine and four principal tests.
7. Name three enzymes, giving origin and function of each.
8. Discuss prophylaxis with relation to the feet.
9. Define organic chemistry, inorganic chemistry, physiological chemistry.
10. Differentiate between normal and abnormal heart sounds.
11. Give origin and function of the nerves supplying the great toe.
12. What may be learned from palpating the pulse?

(Answer ten questions only.)

ELEMENTARY CHEMISTRY AND TOXICOLOGY
Drugless Practitioners
October 20, 1920
DAIN L. TASKER, D. O.

1. What are the main inorganic elements in the composition of the body?
2. Name a secretion in the body containing (1) Cholesterin, (2) Pepsin, (3) Trypsin.
3. What are the physical characteristics of iodin and how is it obtained?
4. What is the reaction of salt and sulphuric acid? Illustrate by an equation.
5. Illustrate the reaction of salt and silver nitrate by an equation.
6. Where are calcium carbonate and calcium phosphate found in nature? Give formula for each.
7. Discuss the toxicology of corrosive sublimate.
8. Give the treatment for poisoning by the mineral acids.
9. Discuss lead poisoning.
10. Discuss carbolic acid poisoning and an efficient method of treatment.
11. Give two examples of each of the following classes of poisons: (a) Corrosive, (b) Irritant, (c) Neurotic.
12. What are the symptoms of lysol poisoning and how treated?

(Answer ten questions only.)

CHEMISTRY AND TOXICOLOGY
Physicians and Surgeons
October 20, 1920
DAIN L. TASKER, D. O.

1. Discuss the toxicology of corrosive sublimate.
2. Give the treatment for poisoning by the mineral acids.
3. Discuss lead poisoning.
4. Discuss carbolic acid poisoning and an efficient method of treatment.
5. Give two examples of each of the following classes of poisons: (a) Corrosive, (b) Irritant, (c) Neurotic.
6. What are the symptoms of lysol poisoning and how treated?
7. Name the two chief members of the alcohol group; give formula of each; and commercial derivation of each.
8. Name five enzymes and tell where found and the action of each.
9. Describe a test for indican.
10. What are proteins? Give three examples of animal proteins.
11. What is the chemical significance of the term alkaloid? Give five examples of alkaloids.
12. What are hydrocarbons composed of? Give two examples.

(Answer ten questions only.)

SURGERY
Physicians and Surgeons
October 21, 1920
P. T. PHILLIPS, M. D.

1. In abdominal operations it is frequently necessary that the large intestine be recognized with certainty, or the small bowel be positively identified. Give differences.
2. Name the dangers and give the treatment of carbuncle.
3. Name cardinal symptoms of tumor of brain.
4. State three local and four general causes of epistaxis. Give immediate treatment for condition when so excessive as to become dangerous.
5. Give symptoms and differential diagnosis of renal tuberculosis.
6. Name the varieties of shoulder joint dislocations. Give method of reduction.
7. Treat simple fracture of middle of humerus. What complications may arise?
8. Describe in detail an operation for radical cure of indirect inguinal hernia.

9. In penetrating wound of thorax differentiate between hemorrhage from parietes or lung itself. Treat both conditions.
10. Discuss briefly benign tumors of breast.
11. Name five diagnostic symptoms by which you may differentiate between conjunctivitis and acute iritis.
12. Laborer suffering Pott's fracture. After six weeks, union progressing satisfactorily. Outline subsequent treatment to restore leg to usefulness at earliest possible time.

(Answer ten questions only.)

ORTHOPEDICS AND SURGERY
Chiropodists
October 21, 1920
P. T. PHILLIPS, M. D.

1. Define Chiropody, Antisepsis, Polydactylus.
2. Discuss briefly blisters and blood blisters of the feet. Their cause, importance and treatment.
3. Describe in detail when ingrowing toenail should be treated surgically.
4. Discuss flat-foot, its causes. Give treatment.
5. What is a bunion?
6. In what conditions of the feet would you have the urine examined?
7. Define gout. Differentiate from rheumatism as confined to feet.
8. Discuss Callosities; their causes; results if not treated. Give treatment.
9. Classify talipes.
10. Diagnose fracture of first metatarsal bone.
11. Diagnose dislocation proximal phalanx second toe.
12. Outline briefly the routes pus may take following infection of the deep plantar fascia.

(Answer ten questions only.)

GENERAL DIAGNOSIS
Drugless Practitioners
October 20, 1920
WM. R. MOLONY, M. D.

1. Differentiate diagnosis between orchitis, hydrocelo, varicocelo and inguinal hernia.
2. Give the etiology and diagnosis of amoebic dysentery.
3. Discuss ascites, its etiology and symptoms.
4. Give symptoms and differential diagnosis of erythema nodosum.
5. (a) What may cause enlargement of the spleen?
   (b) Give the accompanying signs and symptoms of any one of these diseases causing same.
6. Differentiate chancre, chancroid, herpes progenitalis.
7. Give symptoms and differential diagnosis of acute anterior poliomyelitis.
8. Differentiate acute felicular tonsilitis from other acute infectious lesions of the throat.
9. Differentiate intestinal, biliary and renal cholic.
10. Describe the prodromal stage of general paresis.
11. Give the differential diagnosis of acute appendicitis in an adult woman.
12. Discuss the significance of wrist drop.

(Answer ten questions only.)

(Make your answers brief, yet comprehensive, and divide your time so that you will have ample time for each of the questions answered.)

GENERAL MEDICINE
Physicians and Surgeons
October 20, 1920
WM. R. MOLONY, M. D.

1. Give the diagnosis and treatment of amoebic dysentery.
2. Discuss hyperchlorhydria, and with what conditions is it found?
3. Give the diagnosis and medical treatment of cholelithisis.
4. Discuss ascites, its etiology and symptoms.
5. Differentiate hysterical from organic hemiplegia.
6. Give etiology, diagnosis and treatment of erythema nodosum.
7. (a) What may cause enlargement of the spleen?
   (b) Give the accompanying signs and symptoms of any one of those diseases causing same.
8. Differentiate chancre, chancroid and herpes progenitalis.
9. Discuss Reynaud's Disease.
10. Discuss the etiology and differential diagnosis of orchitis.
11. Give etiology and symptoms of an infective myocitis of any region of your own selection.
12. Give symptoms and differential diagnosis of acute anterior poliomyelitis.

(Answer ten questions only.)

(Make your answers brief, yet comprehensive, and divide your time so that you will have ample time for each of the questions answered.)

DERMATOLOGY AND SYPHILIS
Chiropodists
October 20, 1920
WM. R. MOLONY, M. D.

1. What is a chancre? Give differential diagnosis.
2. Discuss pyogenic infections of the skin of the foot.
3. Give the diagnosis of ringworm of the foot.
4. Discuss trophic changes of the skin of the foot.
5. What conditions may produce vesicles of the skin of the foot?
6. Describe the appearance of icthyosis.
7. What constitutional diseases frequently involve the foot?
8. Discuss probable causes of anaesthesia of skin of the foot, without any objective signs being present.
9. What is significance of foot drop?
10. Differentiate tubercular and syphilitic ulcer.
11. Describe the appearance of the toes in leprosy.
12. Give the diagnosis of epithelioma.

(Answer ten questions only.)

(Make your answers brief, yet comprehensive, and divide your time so that you will have ample time for each of the questions answered.)

ANATOMY AND PHYSIOLOGY
Chiropodists and Midwives
October 19, 1920
ALFRED J. SCOTT, M. D.

1. What blood vessels pass to and from the liver?
2. What bones unite to make the pelvis?
3. Name the twelve pairs of cranial nerves.
4. Mention the sutures at the vertex of the skull and state what bones they unite.
5. Describe the pulmonary veins.

6. Give a general description of the alimentary canal, naming its successive divisions.
7. Name the active principles of the digestive secretions and state how each affects the food.
8. Describe a complete physiological revolution of the heart.
9. What post-mortem test should be applied to prove that air has entered the lungs of a supposedly still-born child?
10. Wherein does the temperature of the body differ in advanced age from its tation of the pupil.
temperature in middle life?
11. Account for the contraction and dila-
12. In what manner physiologically does a largely distended stomach produce death?

(Answer ten questions only.)

ANATOMY AND PHYSIOLOGY
Drugless Practitioners
October 19, 1920
A. J. SCOTT, M. D.

1. What blood vessels pass to and from the liver?
2. What bones unite to make the pelvis?
3. Name the twelve pairs of cranial nerves.
4. Mention the sutures at the vertex of the skull and state what bones they unite.
5. Describe the pulmonary veins.
6. Give a general description of the alimentary canal, naming its successive divisions.
7. Name the active principles of the digestive secretions and state how each affects the food.
8. Describe a complete physiological revolution of the heart.
9. What post-mortem test should be applied to prove that air has entered the lungs of a supposedly still-born child?
10. Wherein does the temperature of the body differ in advanced age from its temperature in middle life?
11. Account for the contraction and dilatation of the pupil.
12. In what manner physiologically does a largely distended stomach produce death?

(Answer ten questions only.)

ANATOMY AND HISTOLOGY
Physicians and Surgeons
October 19, 1920
A. J. SCOTT, M. D.

1. Describe the changes in the vascular system at birth.
2. Give the names of the principal muscles of the back.
3. Describe the ulnar artery as to (a) origin, (b) course, (c) distribution.
4. Describe the tonsils and name some of the arteries that supply them with blood.
5. Locate and describe Peyer's glands.
6. Give the boundaries and mention the contents of the posterior mediastinum.
7. What structures are severed in tracheotomy?
8. Describe the Haversian system.
9. Describe the Popliteal artery and give its branches.
10. Describe the periosteum.
11. What causes (a) circulation of the blood, (b) the beating of the pulse?
12. Describe the portal circulation, also the renal circulation.

(Answer ten questions only.)

SOUTHERN CALIFORNIA PRACTITIONER.

Vol. XXXV. LOS ANGELES, DECEMBER, 1920 No. 12

THE WISE VIRGINS.

BY EDWARD M. PALLETTE, M.D., LOS ANGELES.

It is customary in learned bodies such as this for the retiring officers to unburden themselves in some more or less formal manner. Custom has also decreed that this unburdening shall take a more general form than that of the regular technical papers usually read at the meetings. The aim of this paper is to present a brief defense of those women who do not marry, and of those women who do not bear children. It is a plea for women who work.

For a number of years now, there has been a great deal written, both in the medical and lay press, deploring the falling off of the birth rate in all civilized countries, calling attention to and regretting the decrease of marriages and the increase of divorces in many lands, and emphasizing the great increase in the number of women employed in gainful occupations away from the home.

There is no end to the statistics which bear out these statements. The birth rate and marriage rate in European countries and America are decreasing, while the tendency of women to leave the home and work increases rapidly. The number of women employed in gainful occupations in the United States in 1890 was 3,914,571, and in 1910 was 8,075,772, an increase of more than 100% in twenty years and that before the war. The rate of increase of women so employed was enormously greater during the war.

One of the earliest manifestations of the women movement was a demand for education. College training for women became fashionable. The number of women in colleges in the United States has increased nearly 500% in the last thirty years—from 20,874 in 1890 to nearly 100,000 at present. It is a notorious fact that college women are slow to marry—only one out of two marry, and only two out of five ever have a child. The woman college graduate in America bears only 2/5 as many children as does her sister who does not go to college.

To those of us who are able to remember something of social conditions 25 years ago, the change in the social,

President's Address delivered at the Los Angeles Obstetrical Society, October 12, 1920.

economic and political status of women and in the relative amount of work done by them has been enormous. Women are invading many lines of work which, a few years ago, were considered as belonging entirely to men, and are dominating in many. We have often heard old-time politicians deploring the change in politics. They say that there is no fun in the "game" any more, that women are controlling in all political lines, that they are running the conventions, even the National Conventions. I remember once in London, a highly educated Finnish woman, prominent in her own country, said to me that American men must be a very weak lot or they would not give so many privileges to American women. Perhaps she was right. Perhaps the privileges are not so much given as taken.

Continuous employment of women interferes with matrimony. Only one employed woman out of four is married. Recent investigations made in England, France and the United States show that the employment of women causes an increased rate of infant mortality. This is especially true in the United States.

But is there not another side to this question? Is it all as bad as it seems?

Statistics show a marked decrease in the death rate of infants and young children in recent years—thanks to the obstetrician and the pediatrist. The expectancy of life to the new-born baby is much better today than ever before. Of course it follows that if fewer babies die, fewer need to be born in order to maintain the population. A female salmon deposits 100,000 eggs which hatch into 100,000 young salmon, yet the number of salmon does not increase from year to year. The birth rate among savage peoples is much higher than among civilized, yet the savages grow fewer in number while civilized races increase.

There are other elements besides a decreased infant mortality which tend to compensate for a decreased birth rate. The expectancy of life of the young adult is higher today than ever before. This is due largely to improved sanitation, and an increased knowledge and observance of the laws of health. Time was, not so very many years ago, when the morbidity and mortality rates were lowest in rural communities, and where population was most sparse. This is not true now. Today statistics show that the inhabitants of our largest cities have a lower death rate and a greater expectancy of long life than do the people of the small towns and country. This is due to such things as pure water and milk supply, modern plumbing, proper sewerage, meat and other food inspection, sanitary housing and general health and sanitary inspection and regulation.

The most casual observer of history cannot help but be impressed with the great social revolutions which from time to time sweep over civilized peoples—such as the Protestant Reformation and the Revival of Learning in the Middle Ages. More recent examples in our own time are the Prohibition Movement, Woman's Suffrage, and some form of Socialism, perhaps. It may be that the Women's Movement, this tendency which we observe of women to forsake the old simple life of child bearing and child raising, and leaving the home to engage in and finally do the work of the world, is but another one of these great, radical world movements, which, like them or not, oppose them or not, as we will, are as irresistible as the tides of the sea.

The hospital situation in the city of San Diego at this time is suggestive. There were, until a month ago, two hospitals in San Diego, one conducted by the Sisters of Mercy and one, privately owned and conducted. There was the same shortage of hospital

accommodations there, as has prevailed in Los Angeles and elsewhere. The privately owned hospital had 120 beds and was always well filled. The rates were $35.00 to $65.00 per week. The people who own and conducted this hospital told me a few days ago that under the most careful and business-like management there was always a monthly deficit, and they had been compelled to close their doors. The great difficulty was the cost of supplies and the cost of "help." In the meantime the Sisters' Hospital has its halls filled with cots, and the grounds filled with tent houses, and the Sisters are now negotiating for the purchase of the other hospital. When this deal is consummated, the hospital facilities in San Diego will be entirely in the hands of the Sisters of Mercy. A hospital conducted by a body of women who give their entire lives, all their time, attention and thought to their work, serving without hope of reward or possibility of financial remuneration, a hospital where the same management of the various departments remains unchanged year after year, where no board of whimsical and incompetent directors has to be satisfied, or dividends have to be paid to avaricious stockholders, surely has a great advantage over many hospitals otherwise owned and conducted.

I am somewhat familiar with the trials and tribulations of a certain group of doctors who employ a dozen young women in various capacities about their offices. There are three or four of them who stay on year after year, and are always to be depended upon. With the others, there is a continual procession or going and coming. If they are not getting married, they are getting divorced. If they are not sick with a love affair, they are at home with a menstrual disturbance. They are here today and gone tomorrow. If there were only enough of the time-stricken virgins to do the work, life would indeed be one sweet song.

Only a few years ago, it was an acknowledged fact, and accepted without question, that women were paid much less than men for doing the same work. The only reason given or expected was that "They were women." Such is not the case now. Women are demanding and receiving the same wages as men where the work is the same, and women are excelling men in many lines of work. I remember a college professor I had, an old fellow with very old ideas, who was very fond of saying that, in all the multitudinous pursuits which men and women follow, women have excelled men in but two,—vocal music and the care of very young children. This may have had some slight foundation in fact 25 years ago, but no one would venture such an assertion today.

All economic questions in the final analysis come to a basis of food supply. The history of our own land fauna furnishes a tragic illustration. The Giant Sloths, many thousands of which once roamed the hills and valleys of Southern California and whose remains are found in the Brea pits, fed upon the vegetation of the time. A gradual but radical change of climate destroyed the vegetation, and the sloths became extinct. Their extinction was followed by that of the Saber Tooth Tigers which were dependent upon them for food.

History is full of rapid and radical changes. Such changes are taking place today. It is estimated that by the middle of the present century all wild animals—all land vertebrates, will have disappeared from the surface of the earth. Only a few specimens will remain in captivity. Our children's children will know the deer and the lion only as we know the mastodon and the pterodactyl—from pictures and mounted skeletons.

If this were altogether a sermon, I would take as my text the advice of the wise old King of Ancient Israel as given in Proverbs, VI. 6, "Go to the ant, thou sluggard; consider her ways, and be wise." Since all life is a struggle for existence and only the fittest survive, it may be profitable to look at some of the lower animals and see what elements of strength have enabled them to survive. Let's take Solomon's advice and look to the ant. Men and ants are both social animals and while widely separated in the scale of life, they are the only two successful and dominant animal types of the present age. All other types of animal life are decreasing in number and strength. Of the two, the ant has been more successful than man in organizing permanent social communities.

The stable and well regulated insect societies have always aroused the admiration of those who preach industry, thrift, and stability of society. There are three groups of social insects—ants, bees and wasps. Of these the ants are by far the most successful. There are more ants living today than of all other land animals combined. They inhabit every minute part of the earth's surface, the frozen mountain peaks and polar regions alone excepted. Their untold multitudes have solved the problems which they have had to face in their long and successful evolution by forming communities which have developed the most complicated and intimate relationships with other animals and with plants. The primal instincts of all living things are hunger, love and fear. Their answers are food, reproduction, and protection. It is interesting to observe how the ants have solved these problems.

Each ant community has one queen, who deposits many thousands of eggs from which all the young develop. There are a dozen or so males or drones whose work is to fertilize the eggs. The population of the community consists of a thousand or so workers who feed and protect the young and the queen. All ants as we see them going about are workers. These workers are all undeveloped females, and do not, except under extremely unusual circumstances, take any part in reproduction. If the queen is destroyed, a worker may, in some species, be specially fed up so as to develop into a mature female and become a queen.

If we should carry out the parallel between an ant community and ultra-modern human society, as exemplified by the so-called woman movement, we would soon come to a somewhat disquieting circumstance.

The Belgian poet Maeterlinck has written a delightful book on "The Life of the Bee." After discoursing most entertainingly upon "The Swarm," "The Young Queens," and "The Nuptial Flight," he writes as follows upon "The Massacre of the Males":

> "One morning the long-expected word of command goes through the hive; and the peaceful workers turn into judges and executioners. . . . The great idle drones, asleep in unconscious groups on the melliferous walls, are rudely torn from their slumbers by an army of wrathful virgins. . . . Ended for them are the days of May honey, the wine-flower of lime trees and fragrant ambrosia of thyme and sage, of marjoram and white clover. . . . Before the bewildered parasites are able to realize that the happy laws of the city have crumbled, dragging down in most inconceivable fashion their own plentiful destiny, each one is assailed by three or four envoys of justice; and these vigorously proceed to cut off his wings, saw through the petiole that connects the abdomen with the thorax, amputate the feverish antennæ, and seek an opening between the rings of his

cuirass through which to pass their swords. . . . The next morning, before setting forth on their journey, the workers will clear the threshold, strewn with the corpses of the useless giants; and all recollection of the idle race disappear till the following spring.''

It is a well established biological principle among all plants and animals that every fixed detail of structure or of function, every habit or social relationship of the individual or group has but one end, and that is the perpetuation of the species to which that plant or animal belongs. It is a definite, logical, sociological principle among mankind that anything is right which tends to race advancement and ultimate race survival, and that anything which does not so tend is wrong. There is no other final basis of right and wrong. If there is a growing tendency among women to differentiate themselves into two more or less well-defined groups, one group made up of those individuals whose function is to reproduce, and one whose function is to work away from the home, and there is abundant evidence that such a differentiation has already begun to take place and will develop to a far greater degree in the future, and if such a differentiation proves to be favorable to race advancement and ultimate race survival then it is right that it should be, and we may view it with entire complacence.

If the growing up of a larger body of women who do not want to marry and who do not bear children will help to solve our labor difficulties, then may God speed the day when they will be sufficient in numbers, strength and skill to do their work.

1501 S. Figueroa Street.

THE ADVANTAGES OF INTERNAL VERSION OVER FORCEPS WITH SPECIAL REFERENCE TO DR. POTTER'S METHOD OF VERSION.*

BY H. WALLACE MURRAY, M.D., PASADENA.

Version or turning the polarity of the child with relation to the mother has been practiced as early as the time of Hippocrates.

Celsus about the time of Christ and Aetus some five hundred years later successfully did Podalic Version. Ambrose Pare in 1550 and Weigand in 1807 did successful version and it was used in Japan and Mexico prior to this time, but in a very crude and cruel manner. Wright in 1856 and Braxton Hicks in 1860 described and perfected the combined method.

The use of forceps also dates back to the time of Hippocrates and has come to us through a long series of modifications until today most authorities admit the Simpson forceps with slight modifications to be the best.

DeLee in his definition of forceps says: ''The forceps of obstetrics is an instrument designed to extract the foetus by the head from the maternal passage without injury to it or to the mother. As soon as the right of either is encroached upon the instrument ceases to be the forceps of obstetrics, but becomes simply the instrument of extraction similar to the craniotomy forceps and not so good.''

My object in writing this paper is to bring to your attention the advantages of one method of extraction and to try and prove to you that a great many times either or both the mother or child are mutilated by forceps to such an extent as to make their use not

*Read before the Los Angeles Obstetrical Society, March 9, 1920.

justifiable when we have better and safer means of accomplishing the same results.

In this paper no criticism is attached to the application of low forceps when we terminate an unsuccessful labor on account of a tired and "worn out" mother.

DeLee gives the following indications for forceps:

(1) Pelvis large enough to permit delivery of an unmutilated child.

(2) Cervix must be effaced and dilated or such enlargement easily procurable.

(3) Membranes ruptured and out of way because of dislocation of placenta.

(4) Head engaged or so nearly so that a cautious trial of the forceps may be permissible.

(5) Child must be living, otherwise craniotomy.

There is not one of these indications which may not be given for version with the possible exception of engaged head, though this does not contra-indicate version if quick delivery is necessary.

On the other hand version is indicated in—

(1) Any abnormal attitude of the child, as—face and brow, anterior and posterior parietal bone presentation.

(2) Prolapsed cord.

(3) Placenta previa.

(4) Any complication which requires rapid termination of labor.

(5) Mild contracted pelvis.

According to DeLee this last is the most discussed one and as he says: "The question is, does the head pass through a slightly contracted pelvis easier when coming last than when going first. Experience and experiment on the cadaver prove that it does, but it has to come quicker and as a result many babies die."

If, then, I can prove that by version we can produce more living babies with less mutilation of the mother it seems I have at least partially proven my case.

Version lessens shock by shortening labor; it also conserves the patient's strength and does away with injuries to the baby's head. We cannot disregard the fact that prolonged application of forceps is followed by injurious results to the child such as epilepsy, idiocy, birth palsies, etc., which may be attributed to difficult forceps deliveries.

Dr. Gordon Dickinson of Jersey City says: "I have observed in many families that the first born was not 100 per cent. efficient and when there were a number of children in the same family the later children were the brightest, cleverest and most genial. I have been told or have read that compression of the brain leads to petechial hemorrhages in the cerebral tissue." If this be true, might this not be an argument in favor of version?

It has remained for one of our generation, Dr. Irving W. Potter of Buffalo, to perfect and bring to the attention of the medical profession the advantages of version and to show with what ease and degree of safety it can be practiced.

Whether we agree with Dr. Potter as to the indications for version (for as most of you know Dr. Potter does a version on nearly half of his cases), we will have to admit his results little less than marvelous.

Two years ago Dr. Potter had done over 1200 versions with no maternal mortality and a maternal morbidity and fetal mortality far better than could be obtained by any other method.

For a description of Dr. Potter's method of version I can do no better than quote Dr. Zinke's description of it published in the December, 1918, number of American Journal of Obstetrics, in which he says:

"While the patient is being chloro-

formed to the extent of total unconsciousness, Dr. Potter thoroughly scrubs his hands and forearms with soap and water, after which he puts on a long-sleeved, sterilized gown and skull-cap. He then places upon the left hand and forearm a long-sleeved rubber glove extending up to and slightly beyond the elbow; upon his right hand he wears an ordinary short rubber glove. He invariably uses his left hand to perform version, no matter what the attitude of the child in utero may be. The patient, in the recumbent position, is brought to the edge of the confinement table so that the buttocks extend slightly over the edge. Each leg is supported by a nurse. The thighs are not flexed upon the abdomen, as in the lithotomy position, but simply separated and held apart while the legs hang, loosely flexed in the knees, over the supporting arm or hand of the nurse on each side. The pubic, vulvar, and perineal regions have been previously shaved and rendered aseptic. The bladder is catheterized by the operator himself, and entirely emptied if possible. After lubricating the rubber glove on his left hand and forearm with liquid soap, he proceeds first by dilating the vulva and perineum with the fingers of that hand, introducing one after the other, and effecting gradual dilatation of the parts by alternately spreading the fingers gently apart. In the short space of a minute or two, his hand is within the vagina. His first effort consists in carrying the uterus and child above the brim. This done, he begins to detach the membranes from and around the dilated os. If dilation of the os is not complete, he introduces his whole hand into the lower segment of the uterus, then extends his fingers in every direction and withdraws the hand slowly from the uterus. This maneuver is repeated until he has obtained full dilatation. His hands and fingers act on the principle of a Bossi dilator; the difference is that the hand is a better and safer dilating instrument. During the withdrawal of the open hand and separated fingers, he gently takes hold of the membranes and carefully pulls down the bag of waters, always taking care not to break it. To my surprise this maneuver was not attended by loss of blood in either of the two cases I witnessed.

As soon as full dilatation of the os has been secured, and complete detachment of the membranes within the lower uterine segment is effected the membranes are ruptured and the left hand goes at once in search of both feet, while the right hand supports the uterus from above. When the feet have been found and have been firmly seized between the thumb, index and middle fingers, traction is made upon them, while the free hand upon the abdomen, immediately above the symphysis pubis, pushes the fetal head toward the fundus of the uterus. All of this is done in a quiet, gentle manner. The forearm of the operator closes the vulvar orifice and most effectually prevents the rapid escape of the liquor amnii until the lower extremities plug the os. In this way nearly all of the amniotic fluid remains within the birth canal. The feet, once at the vulva, are held there. The body of the child is expelled entirely by the contractions of the uterus. During the expulsion of the child's body, the operator merely assists in the rotation which Nature directs, and the shoulders are made to descend, dorsum anterior, in either the right or left oblique diameter of the pelvis. No traction is made upon the child while the body is being delivered. A piece of gauze is placed between the legs of the child to catch any meconium that escapes from the anus. When the shoulders of the child have arrived within the pelvic cavity, the operator

rests the body of the child upon his left hand and forearm, and covers it with a warm cloth. With the index and middle fingers of the right hand the arms of the child are brought down as soon as the scapula shows under the pubic arch, first the anterior one, and then the posterior. When this is accomplished, he directs the legs of the mother to be lowered until they are almost in a Walcher position; and then with his right hand the flexed head is pressed into the pelvis from above, while the index finger of his left hand, placed in the child's mouth makes gentle traction upon the head from below. Flexion of the head is thus not only favored, but increased, and with little effort the lower half of the face is brought to the vaginal outlet. The body of the child is now extended toward the mother's abdomen, thus exposing the child's throat, which is gently stroked with the index finger from the chest toward the mouth, for the purpose of emptying the trachea and esophagus of blood and amniotic fluid the child may have swallowed or sucked in during efforts of premature respiration. If the head admits of easy evolution, it is delivered at once; if not, Dr. Potter is in no hurry, because the child can breathe freely with the mouth exposed at the vulva, and the mother is in no danger whatever. Should there be undue delay at this state of birth, the forceps can be applied without difficulty and the head extracted without injury to it or to the mother.''

After witnessing Dr. Potter's work and examining a case before he did a version one cannot help but be impressed with the ease of its performance and of its wider field of usefulness.

By a great many obstetricians version has not been used or even considered in simple difficult labors for the reason that version was considered contra-indicated in primipara and eight out of ten difficult labors were primipara.

Dr. Potter has demonstrated that primiparity is no bar to version for nearly half of his cases are of this type. The grandmothers of the past were content to sit by the fire and knit. In fact it was about all they could do on account of the wrecked condition of their pelvic organs as a result of their treatment at the child-bearing period. The grandmothers of the present generation are not content to be relegated to place by the fire, but want to drive their automobiles or ride in an aeroplane. Do you suppose anything has had more to do with bringing about such a condition in the past than the high forceps application?

With pelvimeter measurements making the detection of contracted pelvis moderately certain, with vaginal cæsarean and extra-peritoneal abdominal cæsarean section so safe a procedure when the classical Cæsarean Section is not indicated, it seems to me that the axis-traction forceps can and should be placed on the museum shelf as a relic of the past ages.

With all due respect to those who prefer to grasp the anterior foot in their versions and feel satisfied with this method, for myself I see nothing to justify such a course. I think it just as essential to grasp both feet as it is to use two blades of the forceps.

According to DeLee, in two hundred and eight cases in which forceps were used version had been tried on only one, while in forty-four cases in which version was done forceps had been tried in six cases, or fourteen per cent., thus showing that version was successfully done where forceps had failed.

As a summary of my conclusions and a possible repetition, I wish to give the salient points as given by Dr. Potter for the successful performance of version.

The cervix should be completely dilated or easily dilatable before version is attempted.

Deep anæsthesia is best at all times. Ninety per cent. of his cases have been chloroformed to a surgical degree without an accident or apparent danger to mother or child.

Operator should wear elbow length gloves.

Bladder should be empty.

Every anti-septic and aseptic precaution should be taken to render the vagina sterile before version is attempted.

Primiparity is no bar to version.

Both feet should be brought down together.

No attempt should be made to deliver the arms until the scapulæ are outside the vulva and then the anterior arm first.

The operator must remember that in delivering the head extreme flexion is necessary and can be produced by gentle traction in the child's mouth and pressure above the pubes. The after coming head may be delivered with forceps if necessary. After the delivery of the chin and mouth mucous will flow from the child's mouth. This should be removed because many children breathe before the complete delivery of the head.

The operator should have a perfect knowledge of the attitude of the child in the uterus and the ear is a better guide in gaining this knowledge than the sutures or fontanelles.

Version can be accomplished only by introducing the hand into the fundus and by exploring the uterus and fetal parts carefully.

Version is a procedure which should never be hurried; the operator should always be master of the occasion.

The Walcher position gives the best results.

If the membranes have not ruptured it is well to separate them from the uterine wall as high up as possible before rupture is undertaken.

Maternal mortality in properly selected cases should be nil and maternal morbidity is no greater than in normal cases. The mutilation of the soft parts is less than that resulting from forceps. The principal dangers to the child are due first to prolapsed cord, partial, complete or concealed; the last being more common than is generally supposed; and secondly to prolonged pressure of the uterus upon the child in neglected faulty presentation cases and in border line cases of contracted pelvis.

The intelligent application of forceps to the after coming head has greatly reduced the fetal mortality and morbidity.

According to American Medicine of July, 1917, a Bulletin recently issued by the Children's Bureau of the Department of Labor, more women between the ages of 15 and 45 years die of puerperal diseases than any other disease except tuberculosis. About 15,000 maternal deaths, the results of pregnancy and labor, occur annually in the United States and these figures show no decrease since 1900. Are we doing all we should to lessen these deaths?

Let us do all we can to mitigate the terrors of the confinement.

Let us study to perfect our technique in version and see if it has not a wider field of usefulness than in the past.

314 Chamber of Commerce Building,
Pasadena.

To save fuel: Every hotel in Vienna has signs saying: "It is officially decreed that only Saturday may baths be taken." The Medical Record says no self-respecting Viennese would think of taking a cold bath.

SOUTHERN CALIFORNIA PRACTITIONER.

A MEDICAL, CLIMATOLOGICAL AND SOCIOLOGICAL MONTHLY MAGAZINE.
This journal endeavors to mirror the progress of the profession of California and Arizona.

Established in 1886 by Walter Lindley, M.D., LL.D.
DR. GEORGE E. MALSBARY, Editor and Publisher.

Associate Editors,
Dr. Walter Lindley, Dr. W. W. Watkins, Dr. Ross Moore, Dr. George L. Cole, Dr. Cecil E. Reynolds, Dr. William A. Edwards, Dr. Andrew W. Morton, Dr. H. D'Arcy Power, Dr. B. J. O'Neill, Dr. C. G. Stivers, Dr. Olga McNeile, Dr. W. H. Dudley, Dr. J. M. Mathews.

Address all communications and manuscripts to
EDITOR SOUTHERN CALIFORNIA PRACTITIONER,
Suubscription Price, per annum, $1.00. 1414 South Hope Street, Los Angeles, Cal.

EDITORIAL

VALE, JOHN CALHOUN FERBERT.

The death of Dr. John Calhoun Ferbert at 3:30 p. m. Friday, December 3, 1920, was a shock, not only to the medical profession of Southern California, but also to a wide circle of patients and friends.

Dr. Ferbert had been confined to his bed nearly five months. During that time he had undergone two operations on the spine by Dr. W. W. Richardson. The symptoms were complete paralysis of the legs, pointing to pressure at the fifth vertebra. The diagnosis was made by Doctors Richardson, Brainerd, Reynolds and others.

The first operation developed nothing definite, but the second operation discovered a round cell sarcomatous tumor, surrounding the cord at the 5th vertebra, which was removed and treatment by radium was employed. The doctor showed no improvement in the use of his legs, but from being very depressed mentally he became cheerful and optimistic.

It was two weeks from the time of this last operation until his death, and during this period he took great pleasure in talking with his friends and laughing and joking and expressed his belief that he would recover. Just a few minutes before his death, Dr. Granville MacGowan and Mr. James Cuzner sat and chatted pleasantly with him and at the moment of the seizure that caused his death, his devoted brother was talking with him. The immediate cause of death was a cerebral embolus.

As he had to go, it was a blessing that death came in the midst of pleasant association, with his friends and brother.

The following extracts from Los Angeles daily papers give a graphic picture of the general esteem in which Dr. Ferbert was held in this city:

Few deaths have caused a more acute sense of community loss than that of Dr. John C. Ferbert nationally famous as a surgeon and locally beloved as a man, who died late Friday afternoon in the California Hospital

JOHN CALHOUN FERBERT

after a lingering illness of five months.

Two major operations had been performed upon him in an effort to check the malady, which was in the nature of a spinal affection. It was while he was apparently in better condition as a result of the second operation that death came suddenly to him. In the midst of light-hearted conversation with his brother Albert, who had come from the family home in Cleveland to be with him during his illness, Dr. Ferbert fell back unconscious and expired a few minutes later. A clot on the brain is supposed to have been the immediate cause of his death.

The funeral services, which are to be conducted tomorrow afternoon at 2:30 o'clock in the Masonic Temple, Figueroa and Pico streets, will be under the auspices of the Knights Templar, Frank E. Rising, Eminent Commander of Los Angeles Commandery No. 9, officiating. Members of Base Hospital Naval Unit No. 3, with which he rendered distinguished service abroad during two years of the World War, will escort the body from the Bresee mortuary to the Masonic Temple. The body will be taken East on the Overland Limited Tuesday morning by Albert Ferbert and will be laid beside that of the dead surgeon's father in the family burying ground in Cleveland Saturday afternoon.

CAME POOR AND UNKNOWN.

Coming to Los Angeles in 1892 a poor, unknown boy 20 years of age, John C. Ferbert decided to lay the foundation for his medical career with a thorough study of pharmaceutics. Working in the drug store of Adolf Eckstein and studying pharmacy diligently during all of his spare time, he was soon able to pass, with distinction, the examinations of the State Medical Board. Then began the task of supporting himself while taking the full medical course of the University of Southern California. At the end of that course he was recognized as one of the ablest men who had ever studied there, and received the first prize in obstetrics.

In 1898 he became a partner in the offices of Bicknell & Moore, and upon the dissolution of that firm continued in practice with Dr. F. T. Bicknell, under the firm name of Bicknell & Ferbert.

Within a few years Dr. Ferbert was renowned along the Pacific Coast as a surgeon and diagnostician and was visited by rich and poor from all parts of the United States who had heard of his talents and came here to benefit by them.

At the pinnacle of his career and when receiving one of the largest incomes of any professional man in the State, he took the rank of a naval lieutenant during the war in order that he might serve his country. Thousands of shell-wrenched fighters came under his hands and were restored to life and strength by his skill.

Literally thousands of the poor received his valued services without paying a cent. He was extremely generous towards needy students who came under his observation. He refused to allow any man or woman who was working for an education to pay him for his services and also gave away thousands of dollars to help others.

Dr. Ferbert, who was unmarried, leaves three brothers—Adolph and Albert Ferbert of Cleveland and Gustave Ferbert of Alaska—and two sisters, Bertha Ferbert and Mrs. Ida Hoggenmeier of Cleveland.—Los Angeles Times, December 5, 1920.

In Memory of a Noted Surgeon and a Beloved Citizen.

Saddening to the hearts of a great circle of friends—an innumerable throng of old acquaintances—an ever-increasing army of the recipients of

his benefactions—comes the toll of the death-knell which signals the passing of John C. Ferbert physician, surgeon, patriot, philanthropist and humanitarian.

Dr. Ferbert was known to the older families of Los Angeles and was the practitioner to whom they turned for many years in the troubles and anxieties of illness to their loved ones. For a quarter of a century he had attended the births and stayed the deaths of those who are now prominent in the elder and younger sets.

Himself a protege of the celebrated Dr. Bicknell and subsequently his partner and later successor, Dr. Ferbert came to be regarded as one of the most skillful surgeons, most scholarly pathologists and successful practitioners in his profession.

Moreover his amiable personality, his great warm heart, and his unfailing and indefatigable efforts in behalf of his fellowmen won him the affection of those who grew up in the enjoyment of his service and his advice and counsel.

He devoted himself solely and exclusively to his lifework and but rarely gave himself the relaxation of attention to other affairs. He was unmarried. In later years he lived at the conservative old California Club. His office was for years in the same place in the Bradbury building where he had begun his career with Dr. Bicknell.

When the United States entered into war, however, Dr. Ferbert volunteered his services as surgeon, which were gladly accepted, and he proved an invaluable officer of one of our navy base hospitals. On his return from that service he plunged again into the vortex of a busy and constantly extending practice among the people who needed and relied upon him.

Loyal to his country, faithful to his friends, generous to the poor, and an honor to his profession, he bore the stamp of one of God's noblemen, a gentleman and a scholar, whom to know was a privilege and to be served by him was a blessing.

Those many hearts which sincerely grieve and silently pay their tributes of affection to him who has gone on attest more vividly than words of scroll or carven epitaph how deeply he is mourned.—The Los Angeles Herald, December 6, 1920.

Escorted to the railway station by auto trucks banked high with floral tributes indicative of the esteem in which he was held by countless citizens of the community, the body of Dr. John C. Ferbert will start today on its journey back to Cleveland, O., where it will be buried beside the remains of his father.

Funeral services were held yesterday afternoon. Active pallbearers from the Los Angeles hospital unit that went overseas, appeared fully uniformed, and marched two abreast with the honorary pallbearers, in the procession from Bresee chapel to the Knights Templar Hall at Pico and Figueroa streets. Frank E. Rising, Eminent Commander of Los Angeles Commandery No. 9, conducted the Knights Templar ritual. The body will be accompanied to Ohio by Albert Ferbert, a brother, who was here during the doctor's last illness.

Commanded by J. L. Kennedy, the active pallbearers at the funeral were Drs. Guy Cochran, Edgerton Crispin, Lewis B. Morton, W. W. Richardson, A. P. Charlton, Rea Cowan, Phil Boiler, Frank W. Miller, Rea Smith, A. R. Dickson, Victor Parkin, Louis Josephs, Mark Kelsey, E. E. Burk, R. R. Homer, J. W. Crossan and W. H. Olds.

The honorary pallbearers were Dr. H. Bert. Ellis, Dr. M. L. Moore, Lovell Swiber, O. C. Thompson, Dr. Henry H. Lissner, Dr. H. G. Brainerd, Charles

Seyler, E. E. Millikin, Lucius K. Chase, James L. Cuzner, Louis F. Vetter, P. D. Rowan, H. A. Belcher, Dr. A. H. Jones, George McKay, Arthur J. Peck, Louis W. Meyers, Dr. Granville MacGowan, R. J. Dillon, Dr. Walter Lindley, Dr. W. R. Maloney, W. K. Murphy, Dr. E. W. Fleming, Dr. J. C. Wilson, Walter T. Hicks, Dr. Robert V. Day, Dr. E. J. Cook, H. W. Keder, Charles Hastings, James W. Long, J. W. Wolters, J. W. Wilkinson, Erskine M. Ross, A. L. Schwarz, H. R. Sanborn, Walter R. Leeds, and S. F. Zombro.—Los Angeles Times, December 7, 1920.

MORTON AND KNOPF.

At the recent election of members to the Hall of Fame of the University of New York, there were 178 names voted on; seven were chosen: Samuel Langhorne Clemens (Mark Twain), who received 72 votes; James Buchanan Eads, the engineer, 51; Patrick Henry, statesman, 57; William Thomas Green Morton, discoverer of ether, 72; Augustus Saint-Gaudens, the sculptor, 67, and Roger Williams, the minister, a leader in liberal religion and founder of Providence, R. I., 66. The only woman who received enough votes to place her name on the roll was Alice Freeman Palmer, the educator, who received 53 votes.

It will be seen that Mark Twain received the highest number of votes and Dr. Morton the second highest. Dr. S. Adolphus Knopf has been, through the Southern California Practitioner and other medical journals, earnestly advocating that this honor should be done to the name and memory of Dr. Morton.

Dr. Morton is the first physician to be given a place in this Honor Roll.

Dr. William Osler said: "William T. G. Morton was a new Prometheus who gave a gift to the world as rich as that of fire, the greatest single gift ever made to suffering humanity," and Prof. Welch of Johns Hopkins says: "Surgical Anesthesia has been America's greatest contribution to medicine and surgery, and it would be a thousand pities not to have this recognized in the Hall of Fame. As only one name can be selected for this purpose, it is clear to me that this name should be MORTON."

The medical profession is proud of the fact that Dr. Knopf's campaign has yielded such prompt results.

EDITORIAL NOTES

During the past few weeks two San Joaquin county children have died of rabies. One of these children was bitten by a dog during the latter part of June, but symptoms of the disease did not develop until November, almost five months after the biting. It was not known that the dog was rabid and no effort was made to provide Pasteur treatment for the child. It is important that all cases of illness in domestic animals that may be suggestive of rabies be reported promptly to the local health officer. That children should die of this disease, without receiving preventive treatment, is nothing short of tragedy.

Rabies generally develop about three weeks after the person is bitten, but occasionally the incubation period is as long as six months and it may be even longer. To kill the animal immediately is the wrong procedure. It is better to securely confine the animal for ten days in order to observe symptoms. If it is apparent that the disease is rabies, persons who may have been bitten should be given the Pasteur treatment at once.

Dr. Walter M. Dickie, secretary of the State Board of Health, says:

"Follow your nose if you would avoid botulism. Don't eat any canned goods that give off a very disagreeable odor when the can is first opened. That is the easiest way to avoid botulism. If you must eat the bad smelling material, it should be placed in a large, shallow pan and thoroughly boiled for at least five minutes. Many home canned products are not sufficiently heated during the canning process and may become infected with the botulinus organism. The commercial canners are taking steps to prevent the occurrence of this infection in their products and since they have elaborate equipment for subjecting their products to intense heat they can easily safeguard their output. The housewife is placed at a disadvantage because she cannot subject fruits and vegetables to such intense heat as the commercial canners are able to do. Should any canned products appear spoiled, however, it is easy to properly dispose of such material and thus avoid botulism. Follow your nose if you would avoid botulism."

The Los Angeles County Medical Society on November 23, 1920, elected the following new members: Thos. C. Austin, M.D., 621 Chamber of Commerce Bldg., Pasadena; Arthur S. Baker, M.D., 1329 Kellan Ave.; Otto C. Baumgaertner, M.D., 321 Marsh-Strong Bldg., transfer from Spencer Co., Indiana; Margaret H. Bigby, M.D., 801 Brockman Bldg.; Frank J. Bresliu, M.D., St. Vincent's Hospital; John R. Buckingham, M.D., 2311½ S. Vermont Ave.; Arthur E. Coyne, M.D., 1708 Michigan Ave.; G. H. Ernsberger, M.D., 402 Title Insurance Bldg.; Ralph Hagan, M.D., 424 S. Broadway; H. P. Hare, M.D., 1211 Baker-Detwiler Bldg., transfer from Fresno Co.; Clarence E. Ide, M.D., 308 Cons. Realty Bldg., transfer from San Diego Co.; Nelson W. Janney, 533 Lucerne Blvd., transfer from Santa Barbara Co.; C. H. Lewis, M.D., Butler Bldg.; O. F. Konantz, M.D., 6548½ Hollywood Blvd.; C. H. Lewis, M.D., Butler Bldg., Santa Monica; Glen Edwin Myers, M.D., 518 Marsh-Strong Bldg.; Otto H. Mueller, M.D., 6404 Hollywood Blvd.; Frank Pearl, M.D., 1205½ Central Ave.; Russell Sands, M.D., Venice, Cal.; J. Morris Slemons, M.D., 1117 Brockman Bldg.

BOOK REVIEWS

PRACTICAL BACTERIOLOGY, BLOOD WORK AND ANIMAL PARASITOLOGY. Including Bacteriological Keys, Zoological Tables and Explanatory Clinical Notes. By E. R. Stitt, A.B., Ph.G., M.D., Sc.D., LL.D., Rear Admiral, Medical Corps, U. S. Navy; Commanding Officer and Head of Department of Tropical Medicine, U. S. Naval Medical School; Graduate, London School of Tropical Medicine; Professor of Tropical Medicine, Georgetown University; Professor of Tropical Medicine, George Washington University; Lecturer in Tropical Medicine, Jefferson Medical College; Member National Board of Medical Examiners; Member Advisory Board Hygienic Laboratory; Formerly Associate Professor of Medical Zoology, University of Philippines. Sixth Edition, Revised and Enlarged, with 1 Plate and 177 Other Illustrations Containing 637 Figures. P. Blakiston's Son & Co., 1012 Walnut Street, Philadelphia.

The original plan of a laboratory manual of internal medicine in which clinical notes are presented has been adhered to in the present edition. Such a method emphasizes the necessity for utilizing every diagnostic aid in the study of a case. The present edition has been enlarged by 72 pages and a number of new illustrations have been inserted. A new chapter has been added which gives in tabular form the various protozoal helminthic and arthropodan diseases including such information as definitive and intermediary hosts, reservoir of virus, etc., for each disease parasite. The sections on streptococci, blood flukes and the influ-

enza bacillus have been rewritten. A very simple method for titrating media according to hydrogen-ion concentration has been presented. The section on diseases of the hæmopœtic system has been revised and classified under the headings of polycythæmias, the primary anæmias, the secondary anæmias, the leukæmias, the pseudoleukæmias, and the splenomegalies. The table of anatomical normals has been greatly enlarged to include every important organ. The section on blood chemistry has been entirely changed to present the recent methods of Folin, Myers and others. At the end of the appendix a section which will be of great help to those doing laboratory work only occasionally, has been inserted. This section presents the laboratory procedures indicated in the investigation of the more important diseases and is arranged alphabetically.

NERVOUS DISEASES. A Text-book for the use of Students and Practitioners of Medicine. By Chas. L. Dana, A.M., M.D., LL.D. Professor of Nervous Diseases in Cornell University Medical College; Consulting Physician to Bellevue Hospital; Neurologist to the Montefiore Hospital; Neurologist to the Woman's Hospital; Consulting Physician to the Manhattan State Hospital; Ex-President of the American Neurological Association; Ex-President of the New York Academy of Medicine; Corresponding Member of the Societe De Neurologie, etc. Ninth Edition, with Two Hundred and Sixty-two Illustrations, Including Four Plates in Black and Color. New York, William Wood and Company. Price, $6.50.

It is now twenty-eight years since the appearance of the first edition of this text-book. The successive volumes present in a measure a record of the advancement of neurology during that period. Dr. T. F. Gudernatsch has gone over the anatomical part and it is against his judgment that Dr. Dana has not adopted the Basle nomenclature. Dana declares there is no good reason for not making such a change except that the older nomenclature has become, to some extent, an integral part of descriptive neurology. It is a good thing for students to learn a little of eponymic terms and be reminded of men like Sylvius, Rolando, Willis, Munroe, Meckel and Vieussens, who helped to develop our science.

The great war was a cause of important contributions to neurological surgery and to injuries of the nerves. It also brought wide attention to the results of shock and emotional strain. A chapter on psychology, in its dynamic, descriptive and physiological phases, emphasizes those fundamentals which every student ought to know in order to reason clearly on the subject. A chapter has been added on endemic encephalitis or encephalitis lethargica. Dana holds that the vegetative nervous system, with the glands of internal secretion, forms a study that belongs broadly to internal medicine.

HYGIENE OF COMMUNICABLE DISEASES. A Hand Book for Sanitarians, Medical Officers of the Army and Navy and General Practitioners. By Francis M. Munson, M.D., Lieutenant, Medical Corps, U. S. N., Retired; Lecturer on Hygiene and Instructor in Military Surgery, School of Medicine, Georgetown University; Formerly Instructor in Medical Zoology, Georgetown College; Late Brigade Surgeon, and Provisional Brigade, U. S. Marines. Illustrated. Paul B. Hoeber, New York. Price, $5.50.

This manual presents in a concise and readily accessible form the information now available concerning epidemiology and the management of the communicable diseases, ashore and afloat. The various phases have been carefully separated so that the reader may quickly obtain the information sought on any particular point under all conditions of civil, military, and naval life. Such a presentation of the subjects of epidemiology, prophylaxis, and sanitation saves the time of the physician, sanitarian, sanitary engineer, missionary, or medical officer, and is of real, practical value when he is confronted with the danger or is in the actual presence of any of the communicable diseases, whether in sporadic, endemic, or epidemic form. The sanitary measures and procedures

indicated in various emergencies and under varying conditions are described in carefully headed sections, sub-sections and paragraphs in a manner that enhance the value of the book as a work of ready reference. New features are considered; sanitary measures following great disasters, for example, have not heretofore been discussed in a text-book. The general plan of this part of the work is that followed by the Committee on Standard Regulations of the American Public Health Association in their report entitled, "The Control of Communicable Diseases," published as Reprint No. 436 from the Public Health Reports.

A TEXT-BOOK OF HISTOLOGY. By Frederick R. Bailey, A.M., M.D., Sixth Revised Edition. Profusely Illustrated. New York. William Wood and Co. Price, $5.50.

The text has been thoroughly revised, some parts of it rewritten. The chapter on the nervous system has been revised, extensively rewritten and considerably enlarged, not only by the addition of more detail, but by allusions to the comparative anatomical, clinical, physiological and sometimes even the psychological significance of certain nervous structures. These suggest to the student the meaning of these structures and for this reason sometimes matter of quite a speculative character has been introduced.

This is a very good manual for class-room teaching and for use in connection with practical laboratory instruction.

DIABETES. By Philip Hörowitz, M.D., 196 Pages, with Twenty-seven Text Illustrations and Two Colored Plates. Paul B. Hoeber, New York. Price, $2.00.

Scientific accuracy in the prescription of diets and in their adjustment to the dietetic idiosyncrasies of patients, is the keynote to success in the treatment of diabetes. We should specify each article of food, and the exact amount which is to be eaten during a certain period. Statistics show that the mortality of diabetes was three times as great in 1910 as it was in 1880. The treatment here outlined is built upon the supposition that the underlying causes of the weakened functioning of the pancreas is an intestinal toxemia.

A PRACTICAL MEDICAL DICTIONARY of Words Used in Medicine with Their Derivation and Pronunciation, Including Dental, Veterinary, Chemical, Botanical, Electrical, Life Insurance and Other Special Terms; Anatomical Tables of the Titles in General Use, and Those Sanctioned by the Basle Anatomical Convention; Pharmaceutical Preparations, Official in the U. S. and British Pharmacopoeias and Contained in the National Formulary; Chemical and Therapeutic Information as to Mineral Springs of America and Europe, and Comprehensive Lists of Synonyms. By Thomas Lathrop Stedman, A.M., M.D., Editor of the "Twentieth Century Practice of Medicine," of the "Reference Hand Book of the Medical Science," and of the "Medical Record," Sixth, Revised Edition, Illustrated. New York. William Wood and Co. Price, $6.50.

The first edition of this work appeared in the spring of 1911, the second in the autumn of 1912, and since that time a new edition has been called for every second year. The great number of new words and new definitions has necessitated an increase of twenty pages. For this there is no apology needed, for the new matter is good matter and of interest to those who consult the dictionary.

Stedman's Medical Dictionary deserves the great popularity it has acquired.

Vol. XXXV JANUARY 1920 No. 1

SOUTHERN CALIFORNIA PRACTITIONER

Price Per Year, $1.00 Single Copies, 25 Cents.
Published Monthly.
DR. GEO. E. MALSBARY, Editor.....1414 South Hope Street, Los Angeles, Cal.

Our advertisers are worthy of your support, and if you do not patronize them, you are not rendering the best service to your patients

Entered at the Post Office of Los Angeles, Cal., as second-class matter.

Vol. XXXV FEBRUARY 1920 No. 2

SOUTHERN CALIFORNIA PRACTITIONER

Price Per Year, $1.00 Single Copies, 25 Cents.
Published Monthly.
DR. GEO. E. MALSBARY, Editor.....1414 South Hope Street, Los Angeles, Cal.

Our advertisers are worthy of your support, and if you do not patronize them, you are not rendering the best service to your patients

Entered at the Post Office of Los Angeles, Cal., as second-class matter.

Vol. XXXV MARCH 1920 No. 3

SOUTHERN CALIFORNIA PRACTITIONER

Price Per Year, $1.00 Single Copies, 25 Cents.
Published Monthly.
DR. GEO. E. MALSBARY, Editor.....1414 South Hope Street, Los Angeles, Cal.

Our advertisers are worthy of your support, and if you do not patronize them, you are not rendering the best service to your patients

Entered at the Post Office of Los Angeles, Cal., as second-class matter.

Vol. XXXV APRIL 1920 No. 4

SOUTHERN CALIFORNIA PRACTITIONER

Price Per Year, $1.00 Single Copies, 25 Cents.
Published Monthly.
DR. GEO. E. MALSBARY, Editor.....1414 South Hope Street, Los Angeles, Cal.

Our advertisers are worthy of your support, and if you do not patronize them, you are not rendering the best service to your patients

Entered at the Post Office of Los Angeles, Cal., as second-class matter.

Vol. XXXV MAY 1920 No. 5

SOUTHERN CALIFORNIA PRACTITIONER

Price Per Year, $1.00 Single Copies, 25 Cents.
Published Monthly.
DR. GEO. E. MALSBARY, Editor.....1414 South Hope Street, Los Angeles, Cal.

Our advertisers are worthy of your support, and if you do not patronize them, you are not rendering the best service to your patients

Entered at the Post Office of Los Angeles, Cal., as second-class matter.

Vol. XXXV JUNE 1920 No. 6

SOUTHERN CALIFORNIA PRACTITIONER

Price Per Year, $1.00 Single Copies, 25 Cents.
Published Monthly.
DR. GEO. E. MALSBARY, Editor.....1414 South Hope Street, Los Angeles, Cal.

Our advertisers are worthy of your support, and if you do not patronize them, you are not rendering the best service to your patients

Entered at the Post Office of Los Angeles, Cal., as second-class matter.

Vol. XXXV JULY 1920 No. 7

SOUTHERN CALIFORNIA PRACTITIONER

Price Per Year, $1.00 Single Copies, 25 Cents.
Published Monthly.
DR. GEO. E. MALSBARY, Editor.....1414 South Hope Street, Los Angeles, Cal.

Our advertisers are worthy of your support, and if you do not patronize them, you are not rendering the best service to your patients

Entered at the Post Office of Los Angeles, Cal., as second-class matter.

Vol. XXXV AUGUST 1920 No. 8

SOUTHERN CALIFORNIA PRACTITIONER

Price Per Year, $1.00 Single Copies, 25 Cents.
Published Monthly.
DR. GEO. E. MALSBARY, Editor.....1414 South Hope Street, Los Angeles, Cal.

Our advertisers are worthy of your support, and if you do not patronize them, you are not rendering the best service to your patients

Entered at the Post Office of Los Angeles, Cal., as second-class matter.

Vol. XXXV SEPTEMBER 1920 No. 9

SOUTHERN CALIFORNIA PRACTITIONER

Price Per Year, $1.00 Single Copies, 25 Cents.
Published Monthly.
DR. GEO. E. MALSBARY, Editor.....1414 South Hope Street, Los Angeles, Cal.

Our advertisers are worthy of your support, and if you do not patronize them, you are not rendering the best service to your patients

Entered at the Post Office of Los Angeles, Cal., as second-class matter.

Vol. XXXV OCTOBER 1920 No. 10

SOUTHERN CALIFORNIA PRACTITIONER

Price Per Year, $1.00 Single Copies, 25 Cents.
Published Monthly.
DR. GEO. E. MALSBARY, Editor.....1414 South Hope Street, Los Angeles, Cal.

Our advertisers are worthy of your support, and if you do not patronize them, you are not rendering the best service to your patients

Entered at the Post Office of Los Angeles, Cal., as second-class matter

Vol. XXXV NOVEMBER 1920 No. 11

SOUTHERN CALIFORNIA PRACTITIONER

Price Per Year, $1.00 Single Copies, 25 Cents.
Published Monthly.
DR. GEO. E. MALSBARY, Editor.....1414 South Hope Street, Los Angeles, Cal.

Our advertisers are worthy of your support, and if you do not patronize them, you are not rendering the best service to your patients

Entered at the Post Office of Los Angeles, Cal., as second-class matter

Vol. XXXV DECEMBER 1920 No. 12

SOUTHERN CALIFORNIA PRACTITIONER

Price Per Year, $1.00 Single Copies, 25 Cents.
Published Monthly.
DR. GEO. E. MALSBARY, Editor.....1414 South Hope Street, Los Angeles, Cal.

Our advertisers are worthy of your support, and if you do not patronize them, you are not rendering the best service to your patients

Entered at the Post Office of Los Angeles, Cal., as second-class matter.